COMPETENCY-BASED CURRICULUM IN TOURISM AND HOSPITALITY: IMPLEMENTATION AND PERCEIVED IMPACT ON WORKFORCE PREPAREDNESS IN SOUTHERN PROVINCE, RWANDA

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APPROVAL SHEET

This doctoral dissertation entitled *Competency-based curriculum in tourism and hospitality: Implementation and perceived impact on workforce preparedness in Southern Province, Rwanda,* written and submitted by **MBARUSHIMANA Nelson**, in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Education (Curriculum and Teaching), is hereby accepted and approved.

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ABSTRACT

This study investigated on implementation and perceived impact of competency-based curriculum in tourism and hospitality on the workforce preparedness in Southern Province, Rwanda. This study was guided by constructivism theory. The study used concurrent mixed methods and the respondents (graduates of VTCs) were purposively selected.   Analysis employed descriptive statistics, Pearson product-moment correlation coefficient to establish relationships among variables. multiple regression was used to identify best predictors of workforce preparedness, and through thematic approach, qualitative data enhanced the discussions. Graduates from VTCs offering tourism and hospitality courses in culinary arts level three were happy on how they were prepared for the workforce. Even though the grand mean revealed positive perceptions, other important variables that influence the effectiveness of competency based program were unfavourably perceived by both graduates and hotel managers. The findings   revealed that there is a positive and moderate relationship between competency-based curriculum implementation and workforce preparedness, therefore, the null hypothesis was rejected. Teaching-learning process, identification of competencies and assessment were found to be predictors of workforce preparedness. The study recommended that MBAROVE's model be used to guide proper implementation of competency-based curriculum in VTCs offering tourism and hospitality courses in culinary arts in Rwanda. The study suggested that a similar study be done at national level in all TVETs and that the Ministry of Education to provide trainings to national curriculum developers that enhance global competitiveness in competency-based curriculum.

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DEDICATION

I dedicate this thesis to my beloved wife Mrs UWASE Alice my children Iradukunda Ruhumuliza Ian, Ganza Ruhumuliza Evan, Ineza Rulumuliza Iana, Shima Ruhumuliza Daniella and Shami Ruhumuliza Daniel who believed in me and remained with me at all tides. I love and treasure each one of you.

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LIST OF ACRONYMS AND ABBREVIATIONS

CBE   **:** Competency- Based Education

CPD   **:** Continuous Professional Development

CTE   **:** Career and Technical Education

FET   **:** further education and training

FGD   **:** Focus Group Discussion

GPI   **:** Gender Parity Index

HCT   : Hotels, Catering and Tourism

ILO   : International Labor Organization

IPRC   **:** Integrated Polytechnic Regional Centres

MINEDUC   **:** Ministry of Education

MDG   : Millennium Development Goal

NICHE   : Netherlands Initiative for Capacity development in Higher Education

NFE   : Non-formal education

OE   **:** Occupational Education

PE   **:** Professional Education

PBL   **:** Problem Based Learning

REB   **:** Rwanda Education Board

RTQF   **:** Rwanda TVET Qualification Framework

TAFE   **:** Training and Further Education

THI   : Tourism and Hospitality Industry

TSS   **:** Technical Secondary Schools

TVET   **:** Technical and Vocational Education and Training

UNESCO   : United Nations Educational, Scientific, and Cultural Organization

UNWTO   : United Nations World Tourism Organization

UTB   : University of Tourism, Technology and Business Studies

U.S.   **:** United States

VTE   **:** Vocational and Technical Education

VTC   **:** Vocational Training Centres

VTET   **:** Vocational and Technical Education and Training

VE   **:** Vocational Education

VET   **:** Vocational Education and Training

WDA   : Workforce Development Authority

CHAPTER ONE

INTRODUCTION

Background of the Study

Technical and vocational education and training today faces huge demands, challenges and opportunities. Worldwide, governments and other stakeholders expect Technical and Vocational Education and Training using competency based curricula to address multiple social and economic development priorities, from poverty reduction, food security and social cohesion to economic growth and competitiveness. TVET is already high on international, regional and national agendas.

Australia has put substantial reforms into place to its vocational education and training TVET system over the past 20 to 30 years in order to try to better meet a rapidly changing set of economic and social needs (Wikh , 2000). Considerable emphasis has been placed on the development of a TVET system that is able to develop the contemporary skills of the workforce to enable Australia to better adjust to the rapid technological change and the increasing globalisation of the world economy. The Australian TVET system has been able, through a series of reforms, to become responsive to changing labour market needs. The Australian Government has also been active in assuring the quality of provision to international students, thereby bolstering the brand (Baldauf, Hogarth, & Hoyos, 2008).

In China, the economic growth during recent years has been amongst the highest in the world, resulting in a marked transformation of both the economy and society (Pavlova, 2014). Education is seen as central not only to the continued growth of the economy but also to the change from an agrarian to a knowledge-based, hi-tech economy over a relatively short period of time. TVET is an important component of

the Chinese education system that has been given more attention in the past years due to the crucial impact it has on enhancing national employment and on training a qualified labour force that necessary to boost the Chinese economy. TVET is mainly provided for in the Vocational Education Law of the People's Republic of China adopted in 1996. Vocational education and training (VET) in China comprises pre-employment training at schools, initial vocational training, on-the-job training and retraining of the unemployed, with training courses ranging from short courses through to four years (Baldauf et al., 2008).

Placement rates of VET graduates are, however, reported to be significantly higher than those of graduates from higher education institutions, reflecting a high demand for intermediate skills. More detailed statistics indicate that 73 per cent of graduates from 'vocational schools' are employed, 10 per cent self-employed and 16 per cent embark on further studies (Baldauf et al., 2008).

During recent years, the Indian economy has experienced strong growth accompanied by structural changes, with the emergence of a much stronger demand for labour in sectors such as retail, tourism and health (Okoye & Isaac, 2015). India is also a country with a large youth population, almost a third of the population is aged 16 years or under.

The Government of India has identified a need to invigorate the TVET system. Historically, TVET has been a low status option for young people who generally prefer to take more academically focused courses upon completion of their compulsory education. However, the Government wants to remedy this situation because of emerging skill needs in the economy and to stimulate demand for TVET. The Indian Government envisages increasing the percentage of people receiving a

technical education from 5 per cent currently to 50 per cent over a thirteen year period.

In South Africa, TVET, also known as Further Education Training , seeks to function as a high quality, transformed and responsive system (Arfo, 2015). The government of South Africa uses this system to promote the integration of education and training, as well as the enhancement of learner mobility and progression, to ultimately meet human resource needs. TVET systems are built to address these needs and to further promote personal, social, civic and economic development in their country. Their mission is to provide people with intermediate to high-level skills that would lay a foundation for higher education, facilitate the transition from school to work and develop autonomous life-long learners.

TVET approach has gained a paradigm shift in Rwanda; land locked, situated centrally in Africa in one of the most troubled regions of the world, and is one of the most ambitious nations in contemporary Africa. Aiming to overcome the huge social and economic challenges, following the genocide of 1994, the government presented its ambitions to become a 'Singapore of Africa' in its 2000 document: Vision 2020. Poor in resources, its aim to become a knowledge society and the ICT hub of central Africa, while at the same time stimulating its agricultural sector to advance from subsistence to commercial production and more generally to stimulate entrepreneurship, requires a fundamental economic, social and cultural turnaround in which education and especially TVET is to play a crucial role (Nauta, 2014).

Recently a general consensus had developed that Rwanda, as other countries, faces similar challenges including the liberalization of the market, rapid innovation in technology, and the importance of knowledge to a country's competitive advantage. Against these pressures many countries are turning to their education and training

systems as a part of the solution for dealing with a whole range of social and economic issues. In light of this, and the previous class status of TVET, the Government of Rwanda has undertaken significant steps to strengthen TVET (MINEDUC, 2015). At the forefront of these efforts are the Ministry of Education and the Workforce Development Authority who both have recently made great efforts in promoting TVET and the labour market responsiveness of the education system. TVET has emerged as one of the most effective human resource development strategies that Rwanda has embraced in order to train and modernize the technical workforce development. The new direction of TVET is oriented towards the world of work and the emphasis is on the acquisition of competency based employable skills.

Competency based curriculum in TVET programs is becoming popular nowadays in the world and has gained a paradigm shift in Rwanda (Mbarushimana & Kuboja, 2016). It aims at making TVET much more relevant to meeting the needs of industry and user agencies. Regarding the relevance of competency based curriculum, Dakmara in Dadi (2014) emphasized that, there is a growing interest of community of educators and curriculum developers in enhancing competencies and competence-based curriculum ,because competency-based approaches are increasingly regarded as adequate solutions for reshaping the education system in its ability to empower educators and curriculum developers to adapt their roles to new circumstances and respond to constantly rising new situations in a rapidly changing world.

The tourism and hospitality industry is a fast growing industry and second after coffee as a leading foreign currency earner for Rwanda with international booming investments in the sector. Tourism constitutes about 6 per cent of global goods and services exports, and about 30 per cent of global service exports alone. In 2007, there were over 900 million international tourist arrivals bringing receipts of

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$856 billion. Africa had a 5 per cent share of these arrivals at just over 44 million arrivals generating $28 billion in receipts. Rwanda is part of the East African regional market. This market receives around a quarter of sub-Saharan African tourism receipts when South Africa is excluded, with tourism revenues at around $1 billion in Kenya in 2007 (accounting for around 10 per cent of Kenya's GDP), close to $1 billion of revenues in Tanzania and just under $500 million in Uganda (MINICOM, 2009).

The table below indicates the tourism sector targets in terms of revenue and number of arrivals.

Table 1

Tourism Targets for Rwanda (2009-2020)

	2008 (actual)	2009	2010	2011	2012	2020
Revenue	$210m	$210m	$225m	$244m	$277m	$627m
Number of Arrivals	980,000	980,000	1,031,000	1,089,000	1,199,000	2,219,000

Source : (Minicom, 2009)

With this remarkable growth of the industry, the government endeavoured to address the training component to match the manpower needs. Hospitality and tourism courses have been taught at national level in the TVET schools.

Table 2 shows that at national level Rwanda has 173 Vocational Training Centres schools. Forty four (44) in Southern Province, thirty nine (39) VTCs in Eastern Province; thirty seven (37) VTCs operating in Western Province; twenty nine (29) in Kigali City and twenty four (24) VTCs in Northern Province. It shows that the total number of Vocational Training Centres offering tourism and hospitality curriculum in Rwanda are forty four (44).

Table 2

Accredited TVET Schools Offering Tourism and Hospitality

S/N	Province	Number of VTC Schools by Province	Number of VTC offering Tourism and hospitality
1.	Southern Province	44	12
2.	Eastern Province	39	8
3.	Western Province	37	10
4.	Kigali City	29	9
5	Northern Province	24	5
	Total	**173**	**44**

TVET qualification in all Vocational and Training Centres in culinary art, food and beverage services, front office and housekeeping are aimed to prepare individuals to integrate the hospitality sector and operate as a head steward. It offers the opportunity to work in a household and ensure that hygiene regulations are respected and food preparation is of quality. Work would be undertaken in various hospitality enterprises where food and beverages are prepared and served, including restaurants, hotels, lodges, airports, supermarkets, tour companies, catering operations, clubs, pubs, cafes, cafeterias and coffee shops (Authority, Ministry, & Empowering, 2013).

Statement of the Problem

The Tourism and Hospitality Industry has been identified as a priority sector for Rwanda as it is expected to play a leading role in driving the economy forward. This sector has rapidly grown into a major foreign exchange earner for Rwanda, surpassing agriculture in the last two years. Travelling for a holiday or as a tourist has been made easy and affordable thanks to the sprouting tour and travel companies and deliberate efforts by government to encourage tourism Sharon Kantengwa (2017, March).

The Tourism and Hospitality Industry sector in its unique nature of a service sector has seen increased international investment in the recent past. International hotel brands have made a stake in the Rwandan market. These include regional giants in hospitality such as: The Serena Hotels, the Marriot, Kempiski, Radisson Blue and Mantis group (Rwanda Development Board, 2012). Despite this remarkable growth in the industry, there is a big deficiency of the human resources to match these needs. Customer satisfaction is an important aspect of every successful business including the hotel industry. However, many hotels and restaurant managers face problems trying to satisfy their customers and end up experiencing high levels of customer dissatisfaction because of food and drinks served with low quality and sometimes waiters don't tell exactly when service will be provided (Mubiri, 2016). This scenario raises a concern.

This gap between the growth of the industry and qualified workforce, calls for government intervention toward matching the industry growth by introducing competency-based curricula in TVET program on tourism and hospitality (WDA, 2014).

The primary objective of competency based TVET program is to enable trainees to acquire relevant and effective knowledge, practical skills and attitude for gainful employment in a particular trade or occupational area. Therefore, competency based TVET delivery systems aim at producing the skilled and entrepreneurial workforce that the country needs to create wealth and emerge out of poverty (Watson, 2017).

This study evaluated whether the competency-based curriculum in TVET program implemented in Vocational Training centres prepare graduates for the Tourism and hospitality industry workforce.

Research Questions

This study sought to answer the following research questions:

1. To what extent is the competency-based curriculum in TVET program on tourism and hospitality implemented in the vocational training centres in the following areas:

    a. Identification of competencies

    b. Teaching-learning process

    c. Learning resources

    d. Assessment

2. What are the perceptions of the trainees of their workforce preparedness in terms of:

    a. Competence

    b. Future prospects

    c. Work ethics

    d. Time management

3. Is there a significant relationship between the competency-based curriculum implementation and the graduates' workforce preparedness?

4. What indicators of competency-based curriculum implementation best determine workforce preparedness?

5. How can the TVET program on tourism and hospitality be relevant to the workforce needs of the industry?

Hypothesis of the Study

This study tested the null hypothesis: There is no significant relationship between the competency-based curriculum implementation and the trainees' workforce preparedness.

Significance of the Study

This study came up with a model that will advise on the implementation of competency-based curriculum in TVET program on Tourism and Hospitality program and its relevance to the workforce needs of the industry.

Competency based curriculum in TVET is a newly designed program in Rwanda. It is believed that this study can contribute to poverty reduction and social and economic development of the nation by facilitating demand-driven and high quality TVET that is relevant to all sectors.

This study will significantly contribute to the knowledge of competency based curriculum in tourism and hospitality in VTC implementation and outcome. The results of this research:

- will have a significant contribution to those involved in the curriculum design and implementation
- will have some basic contributions in providing valuable information on the actual workforce preparedness in hospitality industry
- will provide alternative approaches to policy makers, stakeholders, TVET leaders, teachers and researchers
- will serve as a spring board for the researchers interested in further study on the problem under investigation.

Justification of the Study

The rationale behind this study is that other completed works in the field (Anane, 2013; Kufaine & Chitera, 2013; Okoye, 2015; Obwoge, 2016; Dadi, 2016) in Ghana and Ethiopia, looked into competency based TVET curriculum in general but did not focus on a specific program of it and investigate how it is implemented and come up with recommendations and new knowledge. Mbarushimana and Kuboja

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(2016) looked at A paradigm shift towards competence based curriculum: The Experience of Rwanda. The studies did not touch on any component of the implementation of competency based curriculum in TVET program on tourism and hospitality and its impact on Workforce preparedness, which is currently a major concern in the context of Rwanda.

While this education on competency-based training is vastly practiced in vocational education and training world -wide, it has gained a paradigm shift in Rwanda: encouraging the hands-on activity and the sense of self-employment (WDA, 2014). This model has been adopted through the influence of constructivism theory which dwells largely on learner-cantered orientation (Nyback, 2013) . Though the practice in Rwanda has taken over five years since its inception and that graduates from this system are already in the market.

Based on the fact that tourism and hospitality industry is growing rapidly and contributing positively to the national development, it is the intention of this study to fill such gap by comparing perceptions of student trainees and managers from different hospitality institutions offering industrial attachments in order to give necessary recommendations.

Theoretical Framework

A competency-based approach to TVET has been the dominant curriculum model for the profession for many years, and it remains so today (Dadi, 2014). That dominance is still reflected in instructional systems in which skills are checked off when accomplished and assumed to be permanently held by the student thereafter. Constructivism is a new framework or theory of learning. Constructivists believe that knowledge is constructed when an individual attaches meaning to an experience or activity (Nyback, 2013). According to the constructivist approach, instructors need to

adapt to the role of mere facilitators rather than teachers, even though both roles and ways of teaching facilitating must be outlined according to the need of instruction (guidance) and subject. (Luambano, 2014a) states that in order to prevent constructivism from turning into constructionism, need to ensure that the fruits of the students' constructs are appropriately linked to the "real-world" disciplines.

Recent research concerning TVET has discussed the usefulness of constructivist principles (Nyback, 2013b), the essential core of constructivism is that learners actively construct their own knowledge and meaning from their experiences. One of the most important principles of educational psychology is recognizing the fact that knowledge can only be constructed through one's mind and transferred through social interactions. This study is grounded on constructivist theoretical framework, which advocates for learners being guided by the teachers in self-discovery experiences that yield effective learning. The other important point to be considered is constructivist pedagogy. In constructivist pedagogy learning should take place in authentic and real world environment (Luambano, 2014a).

According to Paul (1996) the forms of constructivism identified above all lead to the following pedagogical implications:

- Sensitivity toward and attentiveness to the learner's previous constructions. This includes using students' previous conceptions, informal knowledge, and previous knowledge to build upon.
- Using cognitive conflict techniques to remedy misconceptions. Engaging in practices like this allow students to trouble their own thinking, and it is through this conflict that they will develop their own meanings, or at least seek to rectify the conflict.

- Attention to metacognition and strategic self-regulation. This follows from the previous suggestion when students think about their thinking, and become responsible for their learning.

- Use of multiple representations. In science and especially mathematics, multiple representations offer more avenues with which to connect to students' previous conceptions.

- Awareness of the importance of goals for the learner. This awareness of goals refers to the difference between teacher and learner goals, and the need for learners to understand and value the intended goals.

- Awareness of the importance of social contexts. Various types of knowledge occur in various social settings for instance informal street knowledge versus formal school knowledge.

Content and skills should be made relevant to the learner. In addition, contents and skills should be understood within the framework of the learners' prior knowledge. Teachers serve primarily as guides and facilitators of learning. In competency based curriculum the main argument is that learners actively construct their own knowledge, this has resulted in an increase in popularity for the constructivist approach. The use of interactive problem based learning (PBL) is an example of the constructivist approach. Problem based learning is one method which allows students to apply their knowledge to real world scenarios and applications through the use of online learning (Weegar & Pacis, 2012) . In his view, Kemp (2000) view of "imperatives" connects with the tenets of PBL as a method of teaching and this has particular implications in the PBL setting. Being "student-centred" in PBL involves negotiating with learners, focusing on the starting point that each student brings to the PBL process, and allowing greater control by the student in

terms of the direction and content of learning. With this in mind, it is evident that different types of tasks place different emphases on these aspects.

Experience by Millar and Moreo (2008) advocated the fact that when implementing constructivism in teaching process, teachers must help students to make their thinking visible, to test it against experience, and to reconstruct more viable understandings. The teacher is supposed to switch from the role of an expert, transferring knowledge to a coaching role, guiding students' learning processes. Students are supposed to take responsibility for their own learning, whereas the teacher used to be in charge. This requires a totally different attitude on both parties, perhaps even a paradigm shift.

In constructivist classroom, student learn to identify and define each step and also use the steps in the attainment of the correct problem solution, Cognitive perspective of learning impose student learning problem solving (Jervis & Jervis, 2005). This relatively fits to competency based TVET curriculum. Therefore from discussion made above, constructivism is found to be a better solution to serve as the learning theory foundation for competency based curriculum in TVET program.

Conceptual Framework

A conceptual framework is a set of coherent ideas or concepts organised in a manner that makes them easy to communicate to others. It is the schematic diagram which shows the variables included in the study and illustrates the relationship between the independent and dependent variables (Smyth, 2004).

The paradigm shows the interplay of the independent and the dependent variables, with the assumption that the independent variables influence the dependent variable; in the sense that the implementation of competency based curriculum in TVET program on tourism and hospitality in terms of identification of competencies,

teaching and learning process, learning resources and assessment are assumed to influence the workforce preparedness in terms of competence of students, work ethics, time management and future prospect.

Independent Variables　　　　　　**Dependent Variable**

- **Competency based curriculum implementation**
  - Identification of competencies
  - Teaching and learning process
  - Learning resources
  - Assessment

Workforce preparedness

- Competence
- Work ethics
- Time Management
- Future prospect
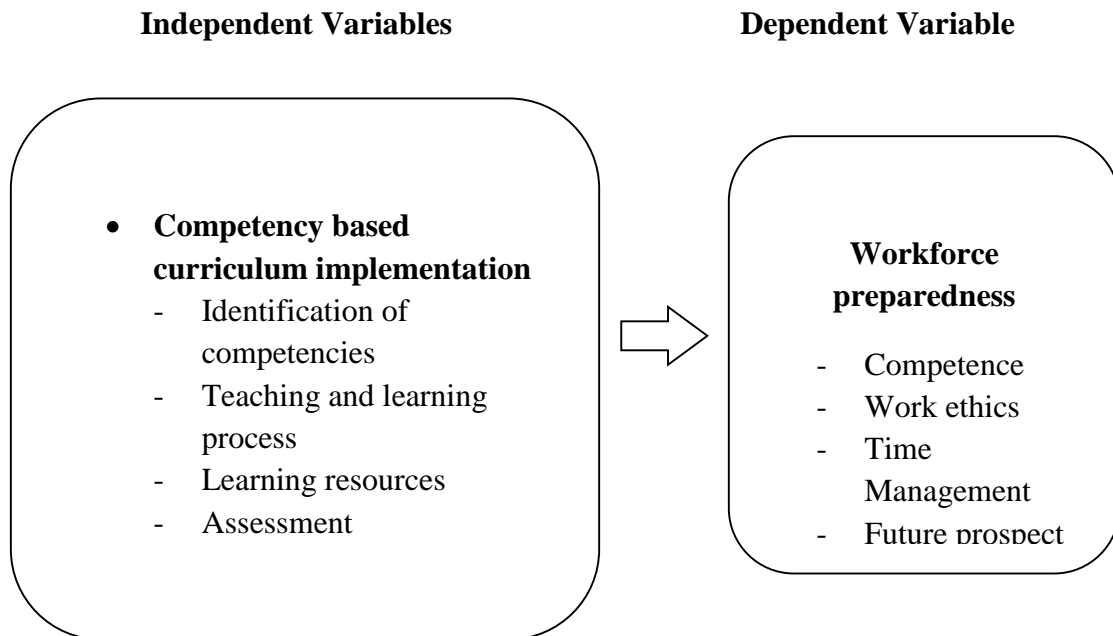
Figure 1. Conceptual framework of the study showing the independent variables and the dependent variable.

Scope of the Study

Though competency based curriculum in TVET is broad, this study specifically explored the competency based curriculum in Tourism and Hospitality: implementation and perceived impact of the workforce preparedness in Southern Province, Rwanda. Geographically, the study was conducted in Southern Province, one of 4 provinces in Rwanda. The main focus was given to competency based curriculum in VTCs related to the Rwandan Hotel and Tourism Industry. Graduates who graduated from   Level 3 in Rwanda TVET Qualification Framework in Culinary arts were targeted.

This study focused on the implementation of competency based curriculum in terms of identification of competencies, teaching and learning process, learning

resources and assessment as independent variables and on other hand workforce preparedness in terms of competence, work ethics, time management, and future prospects as dependent variables. The research instruments that were used in the study was questionnaires, interview schedule, observation schedules, focus group discussion and document analysis.

Definition of Operational Terms

In this section different terminologies and concepts used in this study are defined in an operational way.

Assessment The process of gathering and judging evidence in order to decide whether a person has attained a standard of performance. in competency based training it is the process of measuring learner's skills, knowledge and understanding against the standards occupational standards laid down for a particular unit unit (Michelle Millar & Moreo, 2008)..

Attitudes: They represent a state of mind, feelings, or beliefs about a particular matter, affective abilities. Students are expected to develop values and attitudes about: the dynamic nature of the tourism and hospitality industry and the importance of being a self-motivated problem solver and life-long learner; the importance of hospitable and friendly behaviours appropriate to the industry; and the significance of ethical responsibility in the tourism and hospitality industry (Knani, 2014).

Culinary arts: related to cooking, is the art of the preparation, cooking and presentation of food, usually in the form of meals. A program of study designed to provide training opportunities in the food service and hospitality, tourism industries.

Curriculum: All the learning which is planned and gained by the school, whether it is carried on in groups or individually, inside or outside the school.

Competence: A competence is the result of a combination of knowledge and skills. This integration is demonstrated when the learner is able to achieve specific results and performances, understand what he/she does and do it autonomously. Learners in tourism and hospitality demonstrate competencies related to what they have learnt at the end of training (Wheelahan, 2007).

Competency: A competency in the area of tourism and hospitality is more than just knowledge and skills. It involves the ability to meet complex demands, by drawing upon and mobilising psychosocial resources (including skills and attitudes) in a particular context. For example, the ability to communicate effectively is a competency

Competency-based learning: Is a way of structuring learning activities so that the individual learner can meet a predetermined set of competencies. Given that learners have a variety of ways of learning or learning styles, it is important for them to recognize that competency-based learning will require that they actually perform or do, rather than learn by observing. Observation, reflection and listening are important learning activities, but competency demonstration is the expected outcome for competency-based education.

Competency based education: Is an instructional process that moves education from focusing on what academic believe graduates need to know (teacher-focused) to what students need to know and be able to do in varying and complex situation (Morcke, Dornan, & Eika, 2013). CBE is focused on outcomes (competences) that are linked to workforce needs, as employers and the profession.

Competency- based curriculum: Is the learning design that enables learners to acquire Knowledge, skills and attitudes of defined standards corresponding to relevant workplace requirement and reflect the realities of workplace.

Competency-based training: Competency Based Training is training that is designed to allow a learner to demonstrate their ability to do something. Learners simply have to demonstrate they can do a task, activity or exercise well enough to be assessed as competent (Heller, Steiner, Hockemeyer, & Albert, 2006). In other words, they must be successful at the task they are given to complete that unit of work.

Constructivism: Is basically a theory based on observation and scientific study about how people learn. It says that people construct their own understanding and knowledge of the world, through experiencing things and reflecting on those experiences (Luambano, 2014). In this study constructivism means a learning theory that emphasizes on the ways knowledge is created in order to adapt the new skills, attitudes and behavior.

Future prospects: A probability or chance for future success as based on present knowledge, attitudes and skills acquired.

Hospitality: The hospitality industry is a broad category of fields within service industry that includes lodging, event planning, theme parks, transportation, cruise line, and additional fields within the tourism industry. The word hospitality is the provision of food, beverages and accommodation. Lodging and food services (food and beverage) industries that cover theme and amusement parks, entertainment outlets, cruise companies (International Labour Organisation, 2010). It also refers to the reception of travelers, the way they are treated by the industry employees with empathy, kindness and friendliness and an overall concern for the traveler's well-being and satisfaction.

Identification of competencies: Competencies are identified in occupational standards; comprehensively describe the competence a person has to achieve in order

to be considered qualified in a certain field. It specifies the standards of performance that the trainees are expected to achieve in their work, and knowledge and skills they need to perform effectively.

Impact: Impact is a concept that is used for many purposes and at all stages of development programming. In this context it is used to establish expectations of achievement or success of competency based curriculum towards workforce preparedness trough TVET.

Knowledge: In the context of this study, knowledge is a complex process of remembering, relating, or judging an idea or abstract phenomenon (cognitive abilities) to be competent in a range of routine kitchen tasks and activities in tourism and hospitality Industry.

Learning resources: Any tool that helps teachers teach and students learn in our context of competency based TVET training. Teaching and learning in competency based TVET training involves a variety of teaching methods supported by teaching aids, adequate materials, space and equipment for instruction.

Skills: They are the proficient manual, verbal or mental manipulation of data or things that allow for the execution of well-specified tasks (psycho-motor abilities). Skills are the proficient manual, verbal or mental manipulation of data or things that allow for the execution of well-specified tasks (psycho-motor abilities) (King, 2015).. During the implementation of a competency-based curriculum in Culinary Arts teachers develop a range of technical, personal, interpersonal, organizational and generic skills that can be applied in various contexts, both within and beyond the workplaces of the tourism and hospitality industry. These include effective communication skills, customer service skills, information processing skills, creativity, Problem-solving skills, time management, Apply cooking methods and

cook basic dishes, Perform mise-en-place, Apply hygiene and food safety, food store and others.

Teaching and learning process: Acquisition of new knowledge, skills and attitudes from the teacher. Competency-based teaching and learning is learner- focused and works naturally with independent study and with the instructor in the role of facilitator, teaching and learning more often used in learning concrete skills than abstract learning. The choice of learning process is tailored according to group size, available material resources and communication tools.

Time management: Time management is the process of organizing and planning how to divide your time between specific activities in service delivery with the purpose of making customers satisfied. Realistic time management and organization plans improve productivity and the quality of work.

Tourism: Tourism is about the buying, selling, managing and marketing of numerous activities and services which range from renting hotel rooms rooms (Mazimhaka, 2007).. Tourism has a connotation of leisure travel and tends to be synonymous with holidays. Individuals or groups that are travelling away from home requiring all providers of activities, services, and industries that delivers a travel experience. Tourism and hospitality sectors work closely together to ensure an increase in its tourism receipts.

TVET: Is a comprehensive term that refers to educational process. In addition to general education, it involves the study of technologies and related sciences and acquisition of practice, skills, and knowledge relating to an occupation in various sectors of economic and social life (MINEDUC, 2015). It is a means of preparing learners based on market demand who are competent in the world of work and who can be employed in different economic sectors or create their own employability.

Work ethics: Work ethics is a value-based on hard work and diligence. The individual is polite and helpful to customers, even those who are unpleasant (Jaszay, 2002). In the context of competency based trainings at the end of their trainings they develop an attitude of being honest, having a positive attitude, taking initiative, caring about co workers, doing more than expected, being reliable and responsible, learning new skills and being a team player, takes on additional responsibilities on the job.

Workforce preparedness: Being prepared for the workforce it refers to the level of aptitude for beginning employment. A workforce preparation is a method to introduce youth to the world of work and develop workforce skills necessary for success through active participation in learning experiences (Cordes, 2014).

CHAPTER TWO

REVIEW OF RELATED LITERATURE AND STUDIES

Competency-based education and training has evolved from early vocational education models to more robust and complex approaches (Butova, 2015). This literature review was taken from books, research and educational journals and other publications such as newspapers and online resources. This literature review traces some major landmarks in the growth of competency-based education (CBE), including the discussion of variables considered in this study. It will discuss tourism and hospitality industry from international to national level and their integration in TVET schools in Rwanda.

TVET and its Contribution to the Economic Development

Education plays a great role in contributing to the economic development of both developed and developing countries. Especially sustainable economic development, environmental protection, social and political development of a nation directly or indirectly depends on education (Dadi, 2014). In the same way, TVET also plays an equally important role in social, economic, and political development of a nation together with its academic counterpart. TVET plays a crucial role in human resource development of the country by creating skilled human resource, enhancing industrial productivity and improving quality of life. On strengthening the importance of TVET Sharma (2008) in (Dadi, 2014) indicated education is considered as a key to development whereas TVET is a master key because it has the ability to open all doors of the lifelong learning, reduce unemployment and improve the quality of living.

Definition and Forms of TVET

Terminologies and acronyms referring to technical and vocational education and training vary from country to country. They include: occupational education (OE), vocational education (VE), professional education (PE), career and technical education (CTE), further education and training (FET), technical and vocational education and training (TVET), vocational and technical education and training (VTET), vocational and technical education (VTE), training and further education (TAFE) and vocational education and training (VET).

The 2001 UNESCO and ILO 's General Conference on Technical and Vocational Education and Training referred to TVET as "those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding and knowledge related to occupations in various sectors of economic and social life" (Education, 2010, p. 14).

Table 3

Modes of TVET Delivery

	Technical	Vocational
Formal	Academic technical education	School-based vocational education, vocational training
Non-formal	Work-based training Non-school TE providers	On-the-job training Non-school VT providers

Source: NICHE, (2010).strategy on Technical and Vocational Education and Training

Technical Education

It mainly refers to theoretical vocational preparation of students for jobs involving applied science and modern technology. It emphasizes the understanding of basic principles of science and mathematics and their practical applications, rather than the actual attainment of proficiency in manual skills as is the case with

vocational education. The goal of technical education is to prepare graduates for occupations that are classified above the skilled crafts but below the scientific or engineering professions (Education, 2010) .

Vocational Education and Training

It prepares learners for jobs that are based in manual or practical activities, traditionally non-theoretical and totally related to a specific trade, occupation or vocation, hence the term, in which the learner participates. Vocational education is usually considered part of the formal education system, and usually falls under the responsibility of the Ministry of Education. On the other hand, vocational training is better linked to the labour market and employment development system, and usually falls under the responsibility of the Ministry of Labour and Social Affairs. TVET is often offered at secondary and post-secondary levels (Education, 2010).

The Role of TVET in National Development

All nations in the world are faced with the challenge of improving the capacity of their workforce to respond to their own national development needs and to the demands of a rapidly changing, more globally competitive world. The future success of nations, but also of individuals, enterprises and communities increasingly depends on existence and possession of transferable and renewable skills and knowledge. Many, both in the developed and developing world, recognize the important role that TVET plays in equipping individuals with relevant skills and knowledge, hence enabling people to effectively participate in social, economic and technological innovation processes.

TVET was regarded as a core component of the national development strategy in the international community prior to the 1980s, but gradually lost funding and support as the 21st century and modernization approached. However, the 21st

century's need for new skills to match advances in information, communication and technology has initiated the return of TVET to the international agenda (Education, 2010).

The programmes for universal primary education launched following the Jomtien and Dakar conferences are now leading to rapid increases in the number of young people completing primary school in developing countries. There is already enormous pressure on secondary and vocational systems, which are still very small in many countries. International experience shows that accommodating an increasingly diversified student population calls for the provision of a variety of learning pathways, including in technical and vocational subjects (Netherlands Ministry of Foreign Affairs, 2009).

The globalisation process, the knowledge economy, advances in technology and increased competition due to trade liberalisation are major forces driving change in the world of work (Mohamed, Wahba, & Assurance, 2013). They have important implications for the demand for skills, human resource development and training. The use of new technologies, especially ICT and the introduction of new manufacturing processes, and new modes of work organisation have led to skills intensification and an increase in the demand for higher order skills and productivity.

Nowadays, TVET is regarded as an instrument in creating new employment opportunities and income-generating activities in the formal and informal sectors of the economy, the need for which has become more acute due to the financial crisis (Acakpovi & Nutassey, 2015). TVET can play an important role in economic development and poverty reduction if due attention is given to customizing or targeting education and training provision to local needs.

TVET in a Changing World

TVET is extremely well-positioned to contribute to global development, participation and interaction. It is especially flexible in nature which, for example, allows broad participation of people requiring skills training and is greatly oriented to the labour market which allows appropriate adaptation to changing trends in the local, national and global labour market and economic sectors. In the following text, Pavlova (2014), highlights some important global societal trends in which TVET is particularly suited to facilitate adaptation and which are important for national progression:

Socio-economic Development and MDG Achievement

TVET is extremely suitable for contributing to national socio-economic development and meeting the MDGs through human resource development. Skills development provides individuals with a better chance to obtain productive and profitable employment thereby sustainably increasing their earning power and access to a quality life through being able to afford quality health care, food, clothing and shelter (Education, 2010).

This is particularly crucial in developing countries where the majority of people currently live in poverty (Okoye & Isaac, 2015). The formal sector in developing countries is small and has a low job growth, so that it cannot absorb all school leavers and graduates who seek employment. When TVET curricula are focussed on creating "job-creators" (self-employed workers) rather than "job-seekers", unemployment in developing countries can be reduced, thereby allowing developing countries to get closer to meeting the MDGs (Education, 2010).

This is particularly true for combating unemployment among youth who graduate from secondary school, but do not proceed to the tertiary level. Furthermore,

when TVET provision is gender-balanced and focussed on strengthening the sustainability and profitability of private enterprises, it can foster additional economic development since in developing countries females form approximately half of the labour active population and are usually self-employed (Ogbunaya & Udoudo, 2015).

Global Competitiveness

Not only can TVET support the socio-economic welfare of individuals, but it can also increase international competitiveness. Currently, technological changes are taking place at an extremely fast pace in a fast globalising world. The gap in knowledge and ownership of advanced technologies between developing and developed countries has always been large, with developing countries often adopting technologies and solutions innovated elsewhere and lacking the capacity and resources to adapt most of the technologies to the local context (Education & Skills, 2010).

Transfer of technical knowledge through TVET, coupled with creative skills and career guidance, can raise the innovative capacity of developing countries, allowing them to innovate quality technological solutions for their own context and for export and to keep up with the developed world. Without such interventions, the development gap will widen even more and reduce the competitiveness of developing countries in the global economy (Education, 2010).

The TVET Sector in Developing Countries

TVET delivery systems in developing countries operate in challenging socio-economic environments and contextual frameworks, which urgently need to be addressed if the potential for TVET to contribute to national development is to be realised. Although the state of TVET in most developing countries is largely comparable, geo-political differences do exist in some of the challenges faced and the

level to which they are faced, with differences being noted between the African, Asian and South American contexts. Regional differences also exist in the organisational structures for TVET (Pavlova, 2014).

According to studies done in Indonesia (Suartini et al., 2010) and Ghana (Dasmani, 2011) most graduates from competency based TVET schools lacked adaptability toward the change or development of technology and faced difficulty to cope with it. As a result, the industries were hesitant with competence of the graduates. Competency based TVET program was not effectively implemented in those countries to fulfil the needs of industry. The essence of this study was to find out perceptions of graduates from VTC offering tourism and hospitality courses in Culinary Art level three and views of their employers with the objective to develop a model which will help to prepare graduates for the workforce.

Similarly TVET training program lacks relevance to the work place reality in Ethiopia. The program has some problems in its endeavours to address the actual competency needed by the economy of the country. Most of the programs are of low quality and theory-driven due to resource constraints and lack of skilled TVET instructors. These problems have aggravated the problem of integrating TVET with the world of work. The cooperation between TVET institutions and industries has suffered a problem due to lack of consultation during the planning process (Dadi, 2014).

Education is an evolving process for the edification of mankind to make use and manage the environment at its best. Seeking to solve the paradox of unemployment and job creation, most governments are facing the glitch to involve every citizen especially youths to participate equally in the national economy (Labarre, 2013).

Quality and Number of Students

In most developing countries, science education at the pre tertiary level is too poor to provide students with a solid knowledge foundation. As a result, the number of students at the secondary school level, who have the necessary background to enable them to pursue scientific and technical programmes at tertiary level, is inadequate. In some countries, policy arrangements cause this poor scientific background of students entering higher education. For instance in Ghana, students applying to enter secondary school are required to already make a choice for either the sciences or the humanities (Duodu, 2006).

However, since TVET in Ghana and elsewhere in the developing world suffers from a poor image, partly due to poor performance in the past most students opt for the less technical programmes. This choice of study option is made too early in the lives of the students and since it is irreversible, the practice precludes potential science talents from partaking in scientific learning, innovation and development in their future. The labour market misses out of valuable manpower with practical technical skills. This situation could be addressed by introducing flexibility into the educational system so that students have the possibility to change their minds about their choice of study options at a later level (e.g. through offering compulsory mathematical, computer science and general science subjects even in general secondary schools (Mertineit, 2013). Furthermore, upgrading of teachers, training facilities and curricula improvements would improve the image and quality of TVET, draw more students and provide a solid technical manpower base for the nation.

Quality and Number of Educators

In most developing countries, there are not enough specialised TVET teachers at both secondary and post-secondary levels. This has repercussions on the quality of

students that are produced. Furthermore, most of the educators do not have direct contact with the labour market (through short-term) periodic secondments which would modernise and upgrade their practical knowledge on the actual technologies being employed in the workplace, as well as offer them insight into the actual practical needs of the labour market (Pavlova, 2014). This knowledge could then be incorporated into lessons or be passed on to colleagues through peer-mentoring.

Industry Linkage

Industries are the only place for students to learn competencies and execute competencies learned at school or training institutions. In this regard, some industries play their roles in ensuring that adequate competencies are built in students by accepting students for industrial attachment; moreover, other industries willingly accept students who are sent for demonstrations and practical activities Keiser (2004).

According to Choy and Hauka (2009), industries should play important roles to help TVET institutions to train relevant, competent and competitive graduates who will fit easily to the world of work. Some of these roles are: experts from industry should accept more collaboration to provide the desired training for trainees and industries should open their door for TVET staff and trainees to acquire industrial experiences. In addition, industries should work together with TVET as partner in research development and dissemination of appropriate technology, and they should assist TVET institutions to assess, review curricula and share information regularly. Furthermore, industries should provide equipment to TVET for training students theoretically and helping them practically in order to link theory with practice.

Scholars, learners and employers across the globe agree that the workplace is the most authentic learning environment to train a competent workforce. The workplace provides a context for learners to transform and construct socially

meaningful knowledge and skills. Training providers and industries, through

employers, form partnerships to offer situated learning opportunities in the workplace

so that learners have access to authentic experiences that only the workplace can

offer. Industry attachments have long been accepted as a core component of training

for trainees and are well structured and coordinated. Although industry attachment for

teachers and trainers is equally important, it has not received parallel attention,

coherence or coordination at the policy or organizational levels Oketch, M. (2007).

Effective technical and vocational education and training for industrialization can

only happen if there is a proper attachment of industry and TVET institutions (Choy

& Hauka, 2009).

TVET System in Rwanda

The TVET system in Rwanda, with oversight by the Workforce Development

Authority, is comprised of three streams including 320 schools: Technical Secondary

Schools (TSS), Vocational Training Centres (VTC) and Integrated Polytechnic

Regional Centres (IPRC). Many of these schools are the result of the rehabilitation of

previously existing facilities and newly constructed infrastructure. As Table 4

indicates, facilities have increased by 120% since 2010.

The TSSs in Rwanda include senior 4-6 upper secondary levels and require

passing grades at Senior 3 (lower secondary school) for entry. The selections of

candidates, by Rwanda Education Board, takes into account the student's preferences

(3 choices from the subject combinations) and academic performance. TSS subjects

include: agriculture, welding, electricity, tourism, electrical engineering, carpentry,

general mechanics engineering, veterinary, automobile engineering, secretarial

studies, building construction, civil works, automobile, accounting, ICT, hotel

management, forestry, music, information management and electronics engineering

Table 4

Growth of TVET Schools and Institutions

TVET Schools	2010	2011	2012	2013	Growth
VTCs	61	98	134	132	116%
TSS	77	151	163	167	117%
IPRC	2	2	8	9	350%
Total	140	251	305	308	120%

Source: MINEDUC EMIS, 2014.

(Federal Ministry of Education, 2015). Successful completion of TSS courses permits graduates to receive certification in their area of specialization.

The VTCs are open to lower secondary graduates and out-of-school youth providing short courses (6-12 months) and longer-term courses of 1-3 years. These courses are competency-based (mastery learning) modules developing the various skill levels from foundational to advanced. Short-term basic skills training courses provided by Vocational Training Centres (VTC) have created new skills or augmented existing skills. Many off farm jobs require technical skills or prior experience that may be difficult to acquire in rural communities. Local level initiatives to increase access to skills and training, through VTCs, help equip rural workers with productivity and employability-enhancing skills. These courses target competitive labour intensive subsectors such as agro-processing, retail, construction, transport, hospitality, and light manufacturing.

IPRCs require Senior 6 graduation and are recognized as post-secondary or tertiary institutions. There are currently 9 polytechnics (7 public, 2 private) accredited by WDA throughout the country, which offer diploma and advanced diploma

programs. Work experience opportunities through internships, apprenticeships and industrial.

Attachments are currently integrated into TVET programs and/or being negotiated with the Private sector. In addition to gaining specific skills, this can increase the individual's awareness of the skills demanded by firms and can help them decide which subsector of employment suits them.

There are an increasing number of students enrolled in TVET in Rwanda. Enrolment in VTCs has more than doubled in the four years from 2010 to 2013, where many out-of-school youth who did not attain primary or lower secondary graduation are able to receive technical training for future employment opportunities (Federal Ministry of Education, 2015). At the Technical Secondary School (TSS) level, the GPI has been fairly balanced although shifting to males in 2013, while in VTCs it still trends towards higher male participation (Table 5). Although TVET tends to be a male-dominated sub-sector, the actual numbers of young women enrolling each year is growing. Even at post-secondary level (Integrated Polytechnic Regional Centre), while the GPI is heavily in favour of males, females are studying in higher numbers.

Table 5

Enrolment in TVET Schools and Institutions (2010-2013)

Level	2010 Students			2011 Students			2012 Students			2013 Students		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
TSS	47%	53%	44,526	50%	50%	55,033	52%	48%	58,431	54%	46%	64,866
VTC	49%	51%	6,814	61%	39%	11,315	60%	40%	13,557	64%	36%	15,592
IPRC	77%	23%	433	83%	17%	1,285	80%	20%	2,332	81%	19%	3,435
Total	48%	52%	51,773	53%	47%	67,633	54%	46%	74,320	57%	43%	83,893

Source: MINEDUC, 2014a.

Table 6 provides an outline of the RTQF. It is a 7-level framework that includes a Foundation Level as Level 1, four TVET Certificates (at Levels 2 to 5), a

TVET Diploma at Level 6, and an Advanced TVET Diploma at Level 7. At Level 5, the current Year 12 Technical School Graduation qualification is shown as being at the same level as TVET Certificate III.

Table 6

Rwanda TVET Qualification Framework

TVET Level	Generic Qualification Title
7	Advanced Diploma
6	Diploma
5	Year 12 (Technical) School Qualification TVET Certificate III
4	TVET Certificate II
3	TVET Certificate I
2	TVET Basic Vocational Skills Level
1	TVET Foundation Level

Historical Overview of Competency-based Curriculum

Modern competency-based education and training movements began with U.S. efforts to reform teacher education and training in the 1960s (Cael, 2013). In fact, Cael (2013) described sequential "generations" of competency-based learning and suggested that the models that emerged in the 1980s and early 1990s actually represented the fifth generation of the competency model.

The teacher education movement in the U.S. represented the fourth generation, moving beyond vocational training to education (Hodge, 2007). This is when the word "competency" began to be used widely in association with this model of instruction and learning, and when a number of concepts associated with modern competency-based learning came to the fore (Board , 1999). For example, measurable behavioral objectives were used to specify what a learner should be able to "do" and at what level (standards-based performance) following training (Morcke et al., 2013).

Its origin, being in the USA, competency based education and training gradually entered the context of vocational and education training in the UK, Australia and New Zealand. Several other countries are currently copying the concept of competency based education and training by reinventing or reforming their TVET systems.

Brown (1994) has indicated five generation movements of competency. The first generation of competencies mirrored the development and application of scientific management to the work place. The second generation of competencies promoted the elements of mastery learning. This approach emphasized achievement of success or mastery of present content and separated this achievement from time tabling or scheduling, thus making it dependent of time spent on the task. Then third generation was created by the application of psychology to the design and implementation of vocational education and training program. This stage provided competency based training with its connection to behaviorism. The fourth generation saw the development of behavioural objectives. These were written in a very specific form. If we see the current design and implementation of competency based training with which we are familiar, it represents the fifth generation movement of the competency objectives movement. The fifth generation represents the present approach to competency based training. What is common to all the models of competency based program is their focus on outcomes. Further, these outcomes are always derived from an analysis of the role desired. Therefore, the analysis of the role desired becomes the first step in the curriculum design process. Initially, the industrial parties establish competency standards for the work role or occupation under consideration. This becomes what to be aimed at as the outcomes of training program.

The curriculum document is developed in accordance with these statements and standards.

The characteristics of Competency Based Education are based on the application of recent findings of the cognitive sciences to the concept of competence. Below a list is given of characteristics that, together, form the 'archetype' of a competence-based curriculum (Kouwenhoven, 2003).

- CBE is oriented to the professional practice;

- CBE is based on the future occupational practice of the graduate;

- The curriculum has an integral set-up in which the profession is central;

- CBE is learner-centred and the learning process is central;

- The individual worker is central and, based on his 'competence status' (already acquired competencies), the competencies are defined that still have to be acquired and developed.

Other aspects of a learner-centred approach in CBE are the use of individualized materials, flexible learning time and a continuous feedback to the learner.

Competency based curriculum has a constructivist approach, Mbarushimana and Kuboja (2016) uses the metaphor of the network of steel in reinforced concrete to emphasise that the constructivist paradigm together with the concepts of competence forms the backbone of CBE. Obwoge (2016) states in a succinct way that the main goal of constructivism is competence, not knowledge as in cognitivism, or achievement as in behaviourism. Statements aside, it is known that the quality of the acquired knowledge through active construction is better than passively gained knowledge. In CBE the role of the teacher is that of a 'cognitive guide'. Teachers encourage students to engage in active inquiry and make explicit their tacit

assumptions. A constructivist teacher is more interested in uncovering meanings than in covering prescribed material.

CBE has learning environments focuses on the development of competencies. Disciplinary content is not any more the criterion for arranging the curriculum, but the competencies that should have been acquired and developed by the end of the education programme (Kouwenhoven, 2010). In this sense one could speak of designing and developing the curriculum 'backwards', because the knowledge and skills are determined by the competencies that are needed by a competent professional and not by the disciplinary body of knowledge.

Knani (2014) adds that occupational standards are used to describe a job role or occupation. It specifies the standards of performance that the trainees are expected to achieve in their work, and knowledge and skills they need to perform effectively. An occupational standard is seen as a benchmark against which the actual performance of individuals can be compared and assessed as competent or not. It is like the study statement in a position or job description. These statements describe what a person in particular job is required to achieve and specify the standard to which the job should be done (Brown, 1994).

The Concept of Competency

Competency is a difficult concept which can be explained and interpreted in different ways. In this study the concept is explained in the following ways. Competencies are statements of the characteristics that graduating students should demonstrate which indicate they are prepared to perform and function independently in professional practice (Morcke et al., 2013).

Competency is the possession and development of sufficient skills, knowledge, appropriate attitudes and experiences for successful performance in life. It

is capability of a person to reach specific achievement. Dadi (2014) stressed that, training based on competency based curriculum enables trainees to acquire knowledge, skills and attitudes of defined standards corresponding to relevant work place requirement and to reflect the realities of work place. Competency based training focuses on what is expected of the learners in applying what they have acquired, embodies the ability to transfer and apply knowledge and skills to new situations and environments and lays emphasis on practical experiences.

The Need of Competency-based Training

A series of studies indicate that the traditional program TVET is facing a problem to meet the needs of a large percentage of students enrolled in school (Heller et al., 2006). Competency based training is required because it usually works more effectively to bring employees to the required skill levels than do the traditional methods.

Difference between Competency- based Training and Traditional Program

The primary difference between competency based training and traditional program is that, in competency based education, achievement is constant and time is variable. A learner is expected to be able to demonstrate his achievement of the task or competency by performance. If competency is considered to be important, then it must be achieved regardless of time. In competency based program the experience is more directed towards activating a specific objective. Another difference is that a competency based program is built on feedback system which the teacher and the learner must use (Sudsomboon, 2007).

Another difference is that a competency based program is built on feedback system which the teacher and the learner must use. As Allais (2010) indicated, unlike

the traditional training program, competency based training includes training which is based on competency standards; it is outcome, and not input, or process focused. It is industry involved or led and flexibly delivered, involving self-paced approach where appropriate. It is also performance oriented, assessed using criterion referenced rather than norm-referenced assessment and allows for the recognition of prior learning.

According to Brown (1994), the basic characteristics that distinguish between competencies based training and traditional training program is summarized in table 7.

Experiences in Different Regions: Progress Made and Obstacles Encountered in Competency-based Curriculum

In this section, the researcher discusses how experiences have been made in different Regions and obstacles encountered. By comparing and contrasting experiences from different regions of the world, we can notice that there are common concerns related to the understanding and respect for diversity by means of inclusive policies and student-centred curricular frameworks, pedagogic practices which respond to students' expectations and needs, and teachers' professional development and support school-based. There are several key lessons learned from on-going processes of implementing competency-based approaches, principally linked to Basic and Youth Education. They could provide useful inputs to address a comprehensive curricular reform as a key component to effectively democratize Basic Education in Africa, especially in Rwanda.

Canada

This experience took place in Quebec, Canada, where research was done by ORÈ Institute, led by Philippe Jonnaert. The goal was to reduce the existing gap between what is prescribed in programs of study and what really happens in the

Table 7

Competency Based Program and Traditional Program

No	Characteristics	Competency based program	Traditional program
1	What students Learn ?	Are based on specific, precisely stated students outcomes(usually called competencies or tasks) that have been recently verified as being essential for successful employment in occupation for which the students is being trained. These competencies are made available to all concerned and desirable exactly what the students will be able to do upon completing training.	Are usually based on textbooks, reference materials, course outlines or other sources removed from the occupation itself. Students rarely know exactly what will learn in each successive part of the program. The programs are usually built around chapters, units, blocks and other segments that have little meaning within the occupation. Instructors focus on covering material.
2	How the students Learn?	Provide trainees with high quality, carefully designed, student centered learning activities, media and materials designed to help them master each task. Materials are organized so that each individual trainee can stop, slow down, speed up or repeat instruction as needed to learn effectively. An integral part of this instruction is periodic feedback throughout the learning process with opportunities for trainees to correct their performance as they do.	Rely primarily on the instructors to personally deliver most of the instructions, lectures, discussions and other instructor centered learning activities. Students have little control over the pace of instruction and usually little periodic feedback on progress is given
3	When students proceed from task to task ?	Provide each trainee with enough time (within reason) to fully master one task before being allowed or forced to move on to the next.	Usually require a group of students to spend the same amount of time on each unit of instruction. The group then moves on to the next unit after a fixed amount of time which may be too soon or not soon enough for many individual trainees.
4	When students learn each task ?	Require each individual trainee to perform each task to a high level of proficiency in a job like setting before receiving credit for attaining each task. Performance is compared to preset, fixed standard.	Rely heavily on paper and pencil tests and each student performance is usually compared to the group norm students are allowed (and usually forced) to move on to the next unit after only marginally mastering or even failing the current unit.

Source: Brown, (1994)

classroom. By introducing the notion of "competent action", researchers show how a

competency-based approach can be applied to identify the contents of programs of

study, highlighting the idea of contextualization. Working on general basic adult

education, they analyzed the actions of students in context as well as the resources

they used to perform such actions. Researchers call it "competent action in situation".

As a first step, they built a bank of situations by means of a survey of the target population (those who would be affected by the reform), who had to identify real-life situations. As a result, the situations identified revealed a significant gap between the learning content traditionally specified in the programs of study and the situations for which the target population wishes to develop competency (Jonnaert, Barrette, Masciotra, & Yaya, 2006). People identified relevant situations that are not included in traditional programs of studies. Researchers came to the conclusion that the resources needed by people to address everyday problems were not those traditionally associated with school subjects.

Teachers were restricted to what was written in the programs, working on virtual competencies. Consequently, as a second step, researchers grouped situations into classes and then identified pertinent activities which allowed to work on such situations and on resources to be developed. Finally, they identified the competencies involved. From them on, students have been expected to develop competent actions in different classes of situations.

China

Curricular transformations based on competencies have taken place in China. To work on a competency-based approach implies to overcome the vision of curriculum as a prescriptive top down reference, mainly based on closed disciplinary identities and obsolete organization of areas of knowledge (Nanzhao, Muju, Baohua, Wenjing, Xia, & Li 2011).

The reform was aimed at cultivating student competencies in practical situations in primary and secondary education. As explained in (Nanzhao et al., (2011), the Ministry of Education issued the "Programme on Reform of Basic Education Curriculum (Experimental)". The curriculum proposed a nine-year

compulsory education focused on fostering students' motivation and ability in lifelong learning in order to achieve all-round and balanced moral, intellectual, physical and aesthetic student development and advanced character building, through the cultivation of competencies. It tried to overcome the traditional subject-centred curriculum. In this sense, the new curriculum implies a new idea of education dynamically adapted to the demands of a Chinese society influenced by the advent of the knowledge explosion and new technologies.

Before the reform, there were few experience-building courses. Cultural tradition is now considered in the new curriculum as well as compulsory experience-building courses based on integrated practice activity. The aim is for students to gain personal experience in the fieldwork, effectively exercise a responsible citizenship, solve real-life problems and cultivate personal qualities.

A subject-centred curriculum was seen as an effective obstacle for students to find their learning meaningful and to put knowledge into practice (Nanzhao et al., 2011). One of the innovations introduced by the reform was the organization of elective courses and cross-disciplinary studies. The senior middle school was organized by fields of study - language and literature, mathematics, humanities and social science, science, technology, physical culture and health, arts, and integrated practice activity. Each subject consists of a series of module courses, which are independent but logically linked to each other.

Muju Zhu uses the example of a science lesson for junior secondary students (grade 7) to illustrate the situation. In studying the phenomenon of earthquakes, the teacher divided students into three groups to collect information during after-school hours, on three relevant topics. In a week's time, each group was asked to finish its assignment, compile detailed text and illustrations, and prepare a presentation that was

to last three to five minutes. Some obstacles were nevertheless encountered when working on this new curriculum. First of all, China's huge population impels middle and primary schools to put far more students in a class than, for example, their European counterparts would. Another issue was encountered within Chinese culture and tradition regarding the role of teachers who are considered moral and intellectual authorities. This situation sometimes affects the teacher-learner relationship. These difficulties are however being progressively overcome, principally regarding the attainment of more equal and just relationships between students and teachers.

Latin America

From the nineties onwards the Latin American region has been undertaking relevant curricular transformations, principally in Primary and Secondary Education, in a vigorous and dynamic process of educational reforms intended to address the complex and interdependent issues of equity and quality (Opertti, 2007). This wave of reforms is not an expression of the latest fashion or a mechanical replication of models imported from outside the region. It is rather the reflection of a profound will to change the role of the education system as a critical factor in fostering national development, achieving equal access to and fair distribution of opportunities, and establishing the conditions for a decent international integration based on solid competitiveness.

The various reform processes have been carried out according to very diverse ideas, frameworks, strategies, and partnerships. While in overall terms, the reforms share common concerns and challenges, they differ in their agendas, their policy frameworks and decisions as well as their implementation strategies. Diversity and specificity are two distinctive features of these reforms.

A good number of them view the competency-based approach as a way of conceptualizing and implementing significant changes in educational policy, curriculum vision and content, as well as teachers' education and professional development. Although much of the discussion and debate surrounding competencies have been intense, more political than pedagogical, replete with biased conceptions and weak in theoretical support and empirical evidence, they have opened the door to an overall questioning of the education system. A central issues is that traditional ways of viewing the curriculum and the teacher's role, which are very much embedded in conservative disciplinary identities mixed with corporate interests, tend to exclude more than include potential and real learners.

Guatemala

Guatemala has been implementing a competency-based curriculum in Pre-school and Primary Education (levels 4 and 5, and grades 1 to 6) since 2005, and is currently developing a new competency-based curriculum for the basic cycle of Secondary Education grades 7 to 9 (Unesco, 2008). This process of curriculum reform is embedded in the on-going expansion and democratization of learning conditions and opportunities. These elements are seen as crucial factors in fostering a peaceful society, attaining decent levels of cultural and social integration, and overcoming high levels of marginality and poverty. Guatemala is a Central American country covering an area of 108,889 km2 with a population of over 11.2 million people. This population is made up of 25 linguistic communities: 22 different Maya plus Xinka, Garífuna and Spanish-speaking communities. The Mayan population, which is of pre-Hispanic Central American origin, accounts for more than 40% of the country's total population.

In the 1960s, an internal armed conflict began, which lasted more than 30 years. Negotiations were started between the Government and the Guatemalan National Revolutionary Unit (UNRG) in the middle of the 1980s and culminated in 1996 with the signing of the Agreement on a Firm and Lasting Peace. The various agreements signed in the 1990s laid the foundations for a new national agenda for development, recognized the rights of indigenous peoples and established commitments to build a multicultural, multi-ethnic and multilingual country. As a result of this new policy, the monolingual and mono-cultural State gave way to multi-cultural, multilingual State favouring inter-ethnic relations on an equal footing.

The agreements that serve as reference for educational reform are the Agreement on the Identity and Rights of Indigenous Peoples (1995) and the Agreement on Socio-Economic Aspects and the Agrarian Situation (1996). In the first agreements, the Government initiated a reform of the education system, with a series of declared aims including:

• Decentralization and regionalization;

• Community participation in the definition of curricula and school timetables on the basis of proposals by teachers;

• Integration of the educational concepts of indigenous peoples;

• Expansion of intercultural bilingual education;

• Reinforcement of national unity, subject to the recognition of cultural diversity;

• An increased budget for education.

The Guatemalan government has concentrated efforts on expanding its school system. After the signing of the Peace Agreements in 1996, the total enrolment in the education system has grown by 74%. This growth in enrolment resulted in a significant increase in the net rates of schooling in all education levels. It is important

to highlight the growth observed in the net rates of schooling of the two first education levels (pre-school and primary), where there was an increase of 18.2 and 21.7 points respectively between 1996 and 2006.

Ethiopia

The national TVET strategy of 2008 reflected an important paradigm shift of recent years which places quality and relevance of TVET as its priority. According to the strategy, TVET has to respond to the competence needs of the labor market and create a competent, motivated and adoptable workforce capable of deriving economic growth and development (Habtamu, 2016). Mainly, the trust of the strategy is that TVET development relies on an outcome- based system and dedicated and trusting cooperation among stakeholders. Also, TVET has to provide the necessary, relevant and demand- driven education and training that corresponds to the needs of economic and social sectors for employment and self employment. Accordingly, there must be an effort to raise the quality of Ethiopian workforce to an international standard (Moe, 2008).

It is well known that the TVET graduates are not meeting the expectations and demands of economic sectors in Ethiopia. This is why the change in TVET training was required from the traditional approach to a competency- based training approach. Based on this approach, the competency based TVET program should create a competent, motivated, adaptable and innovative workforce in Ethiopia there by contributing to poverty reduction and improving social and economic development. Competency based TVET should increase the number of citizens who find gainful employment and self-employment in different economic sector of the country. According to the strategy of 2008, the national TVET system, in line with many modern TVET systems worldwide, will be reorganized into competency based-

system. This means that the identified competencies needed in the labor market will be the final benchmark of teaching, training and learning.

Ghana

Polytechnics education in Ghana, as it is now, lacks proper direction. Indeed, Acakpovi and Nutassey (2015) stated that education in Ghana can be described as being under experimentation, without a very clear direction and focus. It is observed that Polytechnic education which is meant to enhance trainee's practical abilities and prepare them effectively for the world of work has been degrading gradually. Many polytechnics in Africa do not possess adequate laboratory facilities, the linkages with industries are totally broken, their curriculum has become obsolete and do not respond to the market need. All these factors have negatively affected young graduates of polytechnics for years back. It is extremely difficult for them to value themselves and access a job available on market. Some few who are lucky to be employed have to undertake a certain number of training in their industry in order to meet the job requirements. In view of these problems, Acakpovi & Nutassey (2015) propose the adoption a Competency Based Education (CBE) Approach to re-strengthen the practical skills, the linkage with industry and finally improve work accessibility to Polytechnic's graduates in Ghana. Analysis shows that the CBE approach enhances job accessibility better than the normal programmes and at the same time equips trainees with considerable skills required in industry. However, the limited numbers of students enrolled on the CBE program, the lack of awareness and proper readiness for CBE approach, have contributed to limit the effective implementation of the CBE system in Ghana.

In line with this, one of the key concepts of the competency-based approach is the promotion of significant learning by using a vast repertoire of pedagogical

strategies. Students are different in the way they learn, and, by implementing a competency-based approach, teachers can be better equipped to motivate and engage them in learning processes. Experiences from different regions of the world seem to prove that the competency-based approach could be a valid option to contribute to the attainment of an inclusive curriculum and to the effective democratization of basic education.

Structure and Characteristics of Tourism and Hospitality Sector at International level

The Hotel, Catering and Tourism Industry

Compared to other sectors of the global economy, the industry is one of the fastest growing, accounting for more than one third of the total global services trade. International tourist arrivals have grown by 4.3 per cent between 1995 and 2008 (International Labour Organisation, 2010).
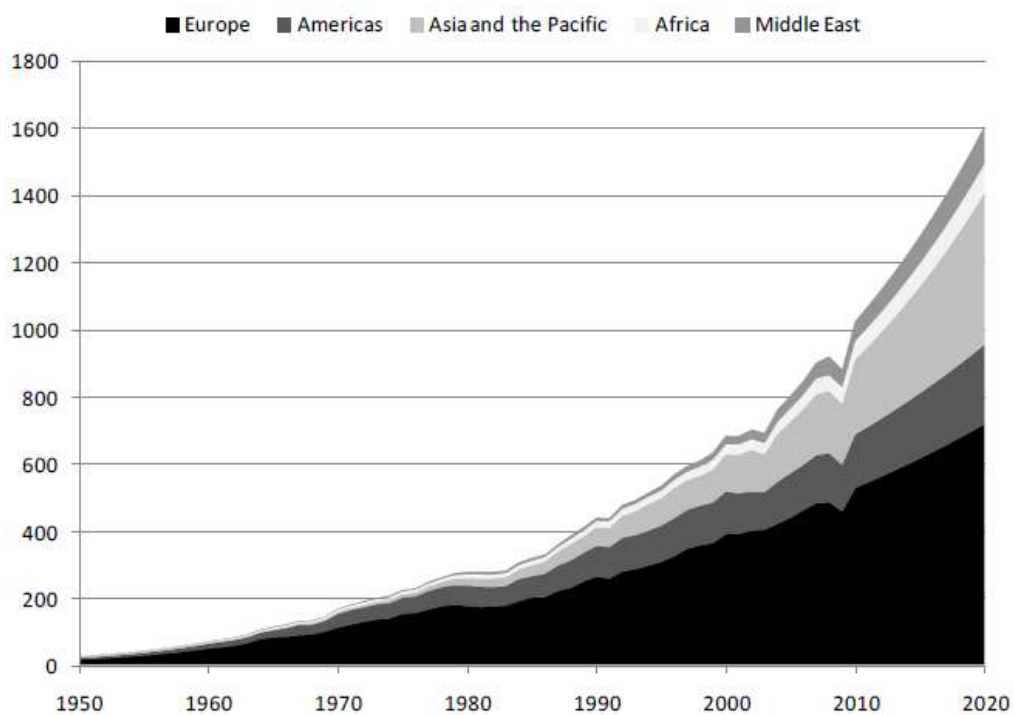
Figure 2. International tourist arrivals, 1950–2020.

Source : (International Labour Organisation, 2010)

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Over the past decade, international tourism arrivals have differed across regions of the world. In emerging regions, international tourist arrivals received by developing countries have continuously risen from 31 per cent in 1990 to 45 per cent in 2008. Asia and the Pacific have seen a significant annual average growth rate of 7.2 per cent, including 21 per cent in Hong Kong (China), 11 per cent in China, and 10 per cent in Japan. North America's arrivals grew by 2.4 per cent, with the United States stagnating at -0.1 per cent. Western Europe had an average growth rate of 2.2 per cent.

Tourism has boasted virtually uninterrupted growth over time, despite occasional shocks, demonstrating the sector's strength and resilience. International tourist arrivals have increased from 25 million globally in 1950 to 278 million in 1980, 674 million in 2000, and 1186 million in 2015 (Curice, Phillips, & Clery, 2016).

The hotel sector is not alone when it comes to growth and the importance of their role as chain operators. Restaurants, particularly coffee shops and the fast food sector have seen major growth in multiple operations worldwide, generally through the franchise format. Chain operations in the restaurant sector are dominated by iconic names in fast food (Africa, 2014).

Tourism is extremely labour intensive and a significant source of employment. It is among the world's top creators of jobs requiring varying degrees of skills and allows for quick entry into the workforce for youth, women and migrant workers. It accounts for 30 per cent of the world's export services. With regard to the supply chain in the sector, one job in the core HCT industry indirectly generates roughly 1.5 additional jobs in the related economy. In 2010, the sector's global economy accounted for more than 235 million jobs, equivalent to about 8 per cent of the overall

number of jobs (direct and indirect), or one in every 12.3 jobs. The UNWTO is expecting the sector's global economy to provide 296 million jobs in 2019.

As an applied discipline, hospitality education has a close and strong linkage with its industry in order to educate hospitality students by keeping abreast with the current industry trends (Millar, Mao, & Moreo, 2010). However, a shortage of skilled and specialized labor has been an ongoing issue in the hospitality industry. A growing demand of hospitality workers and a shortage of skilled and specialized labor can be translated into a growing demand of hospitality educational programs to adequately prepare the workforce to meet present and future demands in this enormous industry (Rahman, 2010).

It is often stressed that some level of industry involvement is important in hospitality curriculum assessment as the hospitality education is heavily linked to the industry. The viewpoints of educators solve this problem as industry experience is a prime requirement for jobs in the hospitality academic world. In that aspect, the educators are in a better position to evaluate because they can interpret both sides of the coin: the academics and the industry.

Thus, curriculum assessment in hospitality education should involve both the perspectives of the learners, and the knowledge providers who are experts in both industry and academia (Rahman, 2010).

However, faculty members can also lack specific knowledge about the curriculum outside their teaching emphasis, and thus might not be accurate judges of student preparedness outside their area of expertise. Moreover, their level of judgment of student preparedness from their own area can be highly biased because they are the ones who are delivering the learning to the students. Students, on the other hand, can best judge their own level of preparedness because they are the ones who are going

through the process of learning being part of the curricula. Faculty can therefore, judge certain generic and fundamental skills of the students but definitely not the specific skills that are taught in the curriculum (Michelle Millar & Moreo, 2008).

Tourism and Hospitality Sector in Rwanda

The Government of Rwanda has identified tourism sector as one of the priority sectors in achieving Vision 2020 and contributor to the eradication of poverty in the country (Republic of Rwanda, 2013)

This East African country is full of natural heritage sites which are declared by UNESCO. Rwanda is enriched with its natural sources and mountains and lakes. But the memorials related to the massacre are really given much importance by the travellers. RDB (2016) states the following attractions for tourist are following:

The Nyungwe National Park

Home to habituated chimpanzees and 12 other primates species (including a 400 strong troop of habituated Ruwenzori Black & White Colobus), it's also a birder's paradise with over 300 species, including 16 endemics, and is home to 75 different species of mammal. This majestic rainforest is filled with nature and wildlife experiences for you to emerge yourself in . Hiking or even biking the beautiful terrain, tracking the famous chimpanzees, experiencing the canopy walk, witnessing beautiful birds, relaxing by waterfalls are just a glimpse of activities that Nyungwe offers.

Lake Kivu

Lake Kivu is considered as one of the best natural views of Rwanda. It runs a long way which is about 100 km along the western border of Rwanda and Congo. Lake Kivu is the highest lake of Africa and flows about 1460m high from the ground. The Rubavu is one of the ports of Lake Kivu. There are two more ports on it. The

Rubavu port contains lake beaches with a stunning view of the most developed city of Rwanda .

Akagera National Park

Akagera combines well with Nyungwe and the Volcanoes National Park to offer a great safari element as it is home to many large plains game species as well as species restricted to the papyrus swamps such as the Sitatunga and the sought-after Shoebill Stork. Notable plains game includes elephant, buffalo, topi, zebra, waterbuck, roan antelope and eland. Other antelope are duiker, oribi, bohor reedbuck, klipspringer, bushbuck and impala. Of the primates, olive baboons, vervets and the secretive blue monkey are seen during the day, with bush babies often seen on night drives.

Volcanoes National Park

The Volcanoes National Park lies along the Virunga Mountains, with 8 ancient volcanoes, which are shared by Rwanda, Uganda and the Democratic Republic of Congo. Just a short two hour drive from Rwanda's capital of Kigali, the park is a central location for exploring some distinctly Rwandan experiences. While a visit to the mountain gorillas is often at the top of visitor, the dramatic landscape also offers thrilling hiking and visits to the fascinating golden monkeys.

Virunga Mountains, Virunga Volcanoes

If any tourist is interested in trekking then Virunga Mountains are waiting for him. This is the best place in Rwanda to trek with several options including to track the mountain gorillas. The highest point of this mountain is 4507m high and named by Mount Karisimbi. You can trek at Mount Viscos which is bout 3711m high and a beautiful lake passes through it. It will take only 6-7 hours of yours to go high and

back. This is one of the best tourist places in Rwanda and most favourite for the nature lovers.

Kigali City

Kigali is a great place to begin or end any Rwanda journey as it's conveniently located in the geographic center of the country. The city is clean and safe, with extremely welcoming people. Travelers will enjoy exploring the great cultural activities - including several award-winning museums, burgeoning music scene, and some of East Africa's most memorable dining experiences.

Congo Nile Trail

227 km (141 miles) of beautiful landscapes, including rolling hills and clear water. The entire trek can be completed in a 10- day hike. However, the trip can be done in sections if travelers do not have the time to complete the entire trail. Trails give stunning views of the Lake Kivu coastline and offer adventurous travelers an exciting way to discover Rwanda.

Tourists coming to explore the above mentioned attractions they spend their nights to different hotels, lodges and take their meals in different hospitality institutions in Rwanda.

The Tourism & Hospitality sector in Rwanda has 12 principal activities. "Hotel & Hospitality/Accommodation" and "Restaurant and Mobile Food service" are the dominant activities in the sector, consisting of 29.4% of and 29.1% respectively. Other activities include: Tour & Travel Agency, Tour Guides, Event Management, Creative Arts & Entertainment Activities, Heritage Activities, Museums and Historical sites, Operation of Sport facilities and National Parks Management.

Tourism & Hospitality sector had a total of 20,860 employees working as Managers, Financial/Insurance Professionals, Liberal Professionals, Technicians, and

Artisans. Women account for 35.7% and 64.3% of labor units in the sector. The expatriates in the sector constitute 3.7%; the majority (65.8%) of which are employed in the Hotel & Accommodation subsector (Rwanda Development Board, 2012).

Skills Gaps

The survey from Rwanda Development Board (2012) indicates that the main impediment to growth and good quality customer service is the large skills deficit in the sector that consequently extends to the industry's subsectors in both the public and private establishments. The survey indicates that the Tourism & Hospitality sector has a skills gap of over 5, 068 in technical areas in the short-term. This is 24.3% of the labor force in the sector. The skills deficits are more acute in hotel & hospitality industry, including hotel managers, tour guides, chefs, cooks, waiters, as well as service personnel and technicians for the hotels.

The introduction of competency based curriculum in TVET program on tourism and hospitality was introduced to fill this gap. The purpose of this research was to find out perceptions of graduates from VTCs offering tourism and hospitality courses in Culinary Arts on their preparedness for the workforce and views from their employers.

The Nature of the Hospitality Industry

Hospitality is the act of kindness in welcoming and looking after the basic needs of customers or strangers, mainly in relation to food, drink and Accommodation (Mackenzie, Chan, & Tse, 2009) . A contemporary explanation of Hospitality refers to the relationship process between a customer and a host. In Hospitality Industry companies or organisations which provide food and or drink and/or accommodation to people who are away from home are identified.

Characteristics of Hospitality and tourism Industry

The hospitality industry is unique in its nature which tends to be service-oriented and has a strong emphasis on human exchange in the service delivery processes.

Product-Service Mix

In the hospitality industry, customers rarely consume pure products but a mixture of products and services (Mackenzie et al., 2009). For example, one who dines in a restaurant will not only pay for the food and drinks but the services provided by the servers. The bill has covered both tangible and intangible experience. Tangible features for example, a steak as the main course, a glass of house wine, well groomed service staff and decoration of the restaurant. Intangible features for example, a comfortable dining atmosphere or the friendly attitude of staff.

Two-way Communication

In order to achieve service excellences in the hospitality industry, two-way communication is one critical factor which requires the involvement and participation of both customers and service staff in the service delivery process. Through interactions with customers, important messages about their needs and expectations can be received by service staff for their immediate actions to create customer satisfaction (Mackenzie et al., 2009). Interactions between internal staff or inter-departments is also critical since total experiences of customers in using any lodging or food and beverage services usually involve team work and exchange of information within the organization.

Relationship Building

The tourism and hospitality industry highly depends on repeated customers for survival. Building long term relationship with customers can benefit the organizations

for generating stable revenues regardless of the instability of seasons and at the same time, developing brand reputations through positive word-of-mouth of the repeated Customers (Mackenzie et al., 2009). In order to develop brand loyalty, different methods are currently applied by the lodging and food service sectors, such as membership programmes which give privileges and incentives to frequent customers.

Diversity in Culture

As hospitality are closely related to tourism industry, it is not surprising that people involved in this sector, no matter customers or staff are experiencing a diversity in culture through interacting with others (Mackenzie et al., 2009). Staff who work in a hospitality organization always have interactions with customers from different regions, or to work and corporate with other colleagues who may have different backgrounds or cultures. Due to their differences in religious beliefs and values, some conflicts and misunderstandings can be easily occurred. Therefore, (Adesina & Chinonso, 2015) added that staff should be open-minded, and come up with solutions together in resolving problems in their duties.

Labor Intensity

Since the hospitality industry is service-oriented in its' nature, it requires a huge supply of labors to create a memorable experience for the customers (Adesina & Chinonso, 2015). This characteristic is especially true for those enterprises which target for high-ended customers. For example, staff-to-guest ratios are high in fine dining restaurants and 5-star hotels which aimed at providing one-on-one services to their customers.

Implementation of Competency-based Curriculum

The goal of competence based curriculum design is to ensure that learners will be able to demonstrate their learned competences after they have acquired a necessary

combination of knowledge, skills, and abilities (Nikolov, Shoikova, & Kovatcheva, 2014). Students acquire these competences through learning activities. The learning activities must be related to the contents of the studies undertaken. In short, the learning references are the competences and their behavioural descriptors that must be attained through learning activities carried out during the study period. Those activities deal with the knowledge resources, which is the raw material of learning. In this section variables under implementation of competency-Based Curriculum which are identification of competencies, teaching and learning resources, learning resources and assessment are discussed.

Identification of Competencies

Anane (2013) describes five essential elements of a CBT system:

- Competencies to be achieved are carefully identified, verified and made public in advance,

- Criteria to be used in assessing achievement and the conditions under which achievement will be assessed are explicitly stated and made public in advance,

- The instructional program provides for the individual development and evaluation of each of the competencies specified,

- Assessment of competency takes the participant's knowledge and attitudes into account but requires actual performance of the competency as the primary source of evidence and

- Participants progress through the instructional program at their own rate by demonstrating the attainment of the specified competencies.

Competencies are identified in occupational standards; comprehensively describe the competence a person has to achieve in order to be considered qualified in

a certain field. It specifies the standards of performance that the trainees are expected to achieve in their work, and knowledge and skills they need to perform effectively.

Occupations and related occupational standards are key success factors in filling the gap between the demand side and education and training system. Occupational standards reflect the actual workplace situation related to current and future requirements. Demand oriented TVET uses occupational standard as the target or expected outcome for TVET delivery. Accordingly, occupational standards are key factors in linking and matching the world of work with the world of education and training (Moe, 2007).

Occupational standards define the competencies of a worker according to the requirements in the labour market. Furthermore, occupational standards comprehensively describe the competence a person has to achieve in order to be considered qualified in a certain field. Competence includes the entire range of skills, knowledge and attitude necessary to perform a specific job (Kufaine & Chitera, 2013)

Occupational standards are used to describe a job role or occupation. It specifies the standards of performance that the trainees are expected to achieve in their work, and knowledge and skills they need to perform effectively. An occupational standard is seen as a benchmark against which the actual performance of individuals can be compared and assessed as competent or not (Mahmood, 2004). The specific job for which a student is going to be prepared must be designed clearly in a competency based instruction system.

According to Anane (2013), there are a number of characteristics of competency-based programs, which   are:

- Competencies are carefully selected,

- Supporting theory is integrated with skill practice. Essential knowledge is learned to support the performance of skills,

- Detailed training materials are keyed to the competencies to be achieved and are designed to support the acquisition of knowledge and skills,

- Methods of instruction involve mastery learning, the premise that all participants can master the required knowledge or skill, provided sufficient time and appropriate training methods are used,

- Participants 'knowledge and skills are assessed as they enter the program and those with satisfactory knowledge and skills may bypass education and training or competencies already attained,

- Learning should be self-paced,

- Flexible training approaches including large group methods, small group activities and individual study are essential components,

- A variety of support materials including print, audio-visual and simulations (models) keyed to the skills being mastered is used, and

- Satisfactory completion of education and training is based on achievement of all specified competencies.

Teaching and Learning Process in Competency-based Curriculum

Teaching and learning in any curriculum require common goals, shared responsibility and accountability between teachers and learners, and supportive or enabling environments to maximize success in learning (Sullivan, 2014). Effective learning is learning which is lasting and capable of being put to use in new and differing situations. Learning has traditionally been conceptualized as theory based on academic frameworks where achievement is judged by the ability to recall key points, information imparted or details and sequences memorized. The leap from this to the

ability to recall, act and perform to set standards of ability and expertise is the leap to a framework based on competence.

Competence based education programs build from the idea that it is more important to focus on outcomes what a student knows and can do than on inputs like how the student learns it, where the student learns it, or how long the student takes to learn it (Thomas , Hdl , & Martin, 2005). This break from inputs means that CBE programs are free to explore new ways to help students learn and new dimensions of what constitutes a "course." Some CBE programs are designed to allow students to learn in a variety of formats, sometimes drawing on *open educational resources* (including written materials, videos, recorded lectures, etc.) or hands-on, project-based learning (Sullivan, 2014).

Many programs are also designed for students to progress at their own pace, rather than at a pace dictated by semesters or credit hours. This means that motivated and efficient students can complete their certificates in less time. Teaching strategies need to be matched to the domain of learning.

Sullivan (2014) briefly outlines the various domains and how a competency-based curriculum may be implemented and the strategy that may be chosen:

Psychomotor domain

- Demonstrate the expected way to perform a given skill. Allow the learner to practice for a while, and then ask for a return demonstration of that skill.
- Set up models or create a simulation exercise in the practical laboratory where learners can have repeated practice of skills with peers and/or teacher supervision.
- Arrange for sufficient practical experiences requiring skill performance of the competencies under direct supervision.

- Create a valid and reliable assessment tool for use in determining competency in skill demonstration.

Affective domain

- Provide a framework for a written analysis of learner activities against the measurable outcomes

- Create a valid and reliable assessment tool for use in determining competency good practice and integrity, respect for all.

- Provide ethics at works

Cognitive domain

- Develop case studies from actual practice requiring discovery or problem-based learning to determine the most appropriate, evidenced based approach to competency.

- Support learner-led discussions, structure debates to address practical situations.

- Always require that the learner provide their reasons (rationale) for their responses to knowledge questions or plans.

- Avoid the temptation to answer every learner question, especially when the learner knows or should know the answer.

Other strategies include self-study modules with suggested learning activities that the learners can complete on their own prior to interaction with fellow learners and teachers. It is important that teachers provide ample time for discussion/dialogue and clarification of concepts to be learned. They also need to encourage and help the learner use their own knowledge and ideas to find possible solutions. One of the most effective teacher strategies for guiding the learner to discover how to proceed or act is called Socratic questioning (Thompson, Bell, Andreae, & Robins, 2013). The primary purpose of Socratic or higher order questioning is to encourage the learner to

challenge how they are thinking, what they are thinking, and what revision of their thinking will lead towards their goal of becoming a competent. Each of these teaching strategies are aimed at helping the learner develop new ways of thinking about what they are learning, encouraging them in their discovery of new knowledge and skills using critical thinking, and supporting their efforts to integrate this new learning into their practice (Thompson et al., 2013). The teacher becomes a coach or facilitator of learning, rather than an all-knowing sage telling the learner what to learn, how to learn it, and what to do with the new learning.

The above domains of learning play a major role in competence based curriculum designing and implementation. Competency-based education and its teaching and learning approaches have received a good deal of support in education systems in recent years. Competency-based education is characterised by the learner's engagement and activity in all aspects of acquiring the knowledge, skills and professional behaviours needed to demonstrate practice in a specific discipline.

Pedagogy Consideration in Competency-Based Education

Competency-based education must include attention to the learner's needs and styles, providing the time needed for the learner to acquire and repeatedly perform or demonstrate the expected competencies (knowledge, skills, professional behaviours) and creating a supportive environment for learning (Thompson et al., 2013). Competency-based education can be pursued through various teaching approaches. However, all curricula need to be evidence-based and outcome focused and all teaching strategies need to be matched to their learning domain (psychomotor, cognitive and affective).

Competency-based teaching

The attributes of competency-based teaching are listed below. These teacher characteristics and expectations contribute to learner success. They also demonstrate the shared responsibility of teachers and learners to reach the goal of competence. The most important characteristic of competency-based education is that it measures learning rather than time (Sullivan, 2014). Students progress by demonstrating their competence, which means they prove that they have mastered the knowledge and skills (called competencies) required for a particular course, regardless of how long it takes. While more traditional models in secondary can and often do measure competency, they are time-based   courses last about four months, and students may advance only after they have put in the study or application time (Sullivan, 2014).

This is true even if they could have completed the coursework and passed the final exam in half the time. So, while most colleges and universities hold time requirements constant and let learning vary, competency-based learning allows us to hold learning constant and let time vary.

Attributes of Competency-based Teaching

Sullivan (2014) states the attributes of competency-based teaching.

- Understand how learners learn

- Match principles of learning and teaching

- Facilitate, rather than control learning

- Model humility, critical thinking, respect, competency & caring at all times

- Support acquisition of knowledge, skills & professional behaviours in all learning domains (cognitive, psychomotor, affective)

- Promote and expect learner accountability for learning

- Provide timely, specific feedback on learner progress beginning with learner self-assessment

- Individualize learning experiences according to needs

- Expect increasing complexity of performance as the learner progresses throughout the programme

Competency-based Training

Competency Based Training (CBT) is an industry and demand driven (outcomes-based) education and training programme based on well defined industry generated standards (occupational standards). These industry standards are the basis upon which the program (Curriculum), assessment and learning materials are designed and developed. CBT programmes focus on what the participant is expected to be able to do in the workplace as opposed to just having theoretical knowledge (Anane, 2013). It is therefore a training programme which ensures that learners gain the necessary knowledge, skills and attitudes or values to be successful in the working environment.

CBT uses both the teacher-centred and the learner-centred approaches, the emphasis is more on the learner-centred approaches (Anane, 2013). The following facilitation methods are employed for the CBT programmes (Watson, 2017):

1. **Direct Instruction Method:** It is effective when you have to introduce learners to a new study area or define new concepts and show how they are interrelated or for teaching factual information. On the other hand, because the method relies mostly on one-way communication there are limited opportunities to get a feed back on the learner's understanding of what is

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being taught and it is not possible to teach psychomotor skills using this method.

2. **Discussion Method:** Allows learners to share knowledge and ideas thereby motivating them to achieve more particularly when others respect their contribution. It also helps the teacher to determine whether the learner understands the content of the lesson. On the other hand, there is the possibility of straying from the topic under discussion and dominating learners might influence the group to accept their view.

3. **Small Group Method:** Pairing is done in such a way that learners help each other to learn faster than the teacher would have been able to do with the whole class. There may however be difficulties with the physical arrangement of the classroom and individual assessment using group work is difficult.

4. **Problem Solving Method:** Very popular teaching strategy for CBT. Provides a challenge to learners; gives them a sense of satisfaction and increases their confidence when they are able to solve new problems and thus gain new knowledge. It also allows the learner to develop critical thinking skills and the ability to adapt to new learning situations. It is however time consuming and because learners sometimes work individually, they may not learn all the things that they are expected to learn.

5. **Research Method:** It is used for workshops and laboratory tasks, field experiments, case studies. It encourages learners to investigate and find answers for themselves and to critically evaluate information. It however requires a lot of time and careful planning of research projects for the learner.

Learning Resources

They are any tool that helps teachers teach and students learn in our context of competency based TVET training. Teaching and learning in competency based TVET training involves a variety of teaching methods supported by teaching aids, adequate materials, space and equipment for instruction. One of the characteristics of competency based instruction program is the effective utilization of learning resources. The purpose of organizing the use of learning resource is to assist all students in the development of marketable skills. In competency based instruction system, each student is given a copy of the job title competencies.

The function of learning resources is to provide a basis for students' learning experiences. Learning resources include not only textbooks, workbooks and audio-visual teaching aids produced by the Education and Manpower Bureau or other organizations, but also web-based learning materials, computer software, the Internet, the media, libraries, resources in the natural environment, and people. All of these should be drawn upon to help students to broaden their learning experiences, and to meet their different learning needs. If used effectively, they will help students to: consolidate what they have learned; extend and construct knowledge for themselves; and develop the learning strategies, generic skills, values and attitudes they need and thus lay a solid foundation for lifelong learning (Guide, 2014).

Some CBE programs are designed to allow students to learn in a variety of formats, sometimes drawing on open educational resources (including written materials, videos, recorded lectures, etc.) or hands-on, project-based learning. Many programs are also designed for students to progress at their own pace, rather than at a pace dictated by semesters or credit hours. This means that motivated and efficient students can complete their programs in less time (Sullivan, 2014).

Learning materials should be well appropriate for the tasks and available for every task. They should be relevant to the occupation in the world of work and materials should be effectively utilized during instruction (Thompson et al., 2013).

Teaching and learning in competency based TVET training involves a variety of teaching methods supported by teaching aids. Adequate materials, space and equipment must be available for instruction. Teaching learning must stimulate the work place and work experience to students. In competency based instruction students are informed about the criteria and attitude that are important to the occupation.

A well-organized competency testing and evaluation program will assist the instructor in making timely and effective decisions regarding the management of the learning resources (Brown, 1994).

Assessment in Competency-based Curriculum

Assessment in Competency-Based Curriculum **is** the process of collecting evidence and making judgments on whether competence has been achieved. This confirms that an individual can perform to the standard expected in the workplace as expressed in the relevant endorsed industry enterprise competence standards (Labarre, 2013).

Assessment should engage students in applying knowledge in the same way as they are used in the real world outside and inside of school.

To determine whether a learner has imbibed what he/she has learnt, an assessment is organised for all learners. The assessment is based on the learning outcomes specified in the learning unit specifications developed for each course. Therefore, in CBT assessment is the process of collecting evidence of a learner's performance, upon which an assessor judges whether or not, or the extent to which a learner has met the performance requirements of the learning outcome laid in a

particular unit and then making a decision, based on these judgements as to whether a learner has achieved the learning outcome as a whole or no (Mcclarty & Gaertner, 2015). In CBT the assessment is continuous and based on actual demonstration of competency.

In other words, it is the process of measuring learner's skills, knowledge and understanding against the standards (occupational standards) laid down for a particular unit. If a learner can show, by generating sufficient evidence of their competence, that they meet the standards, they qualify for that unit. Therefore CBT assessment measures whether a learner is competent or not competent. Only two possible outcomes can be the result of the assessment process, i.e. they are competent (i.e. they can perform what is stated in the standard) or they are not yet competent (they cannot perform yet what is stated in the standard). The assessment is not designed to measure a learner who is 30% or 50% or 80% etc. competent. If they do not meet the standards they develop their skills and knowledge further, after which they are assessed again (Anane, 2013).

The assessment process uses the following approaches to ensure that much emphasis is placed on performance:

- Observation: Observing the learner while he/she is carrying out the activity,

- Product: Looking at something a learner has made or done,

- Questioning: Asking the learner questions that can be answered either verbally or in writing.

The primary difference between competency based training and traditional program is that, in competency based education, achievement is constant and time is variable. A learner is expected to be able to demonstrate his achievement of the task or competency by performance. If competency is considered to be important, then it

must be achieved regardless of time. In competency based program the experience is more directed towards activating a specific objective. Another difference is that a competency based program is built on feedback system which the teacher and the learner must use. As Allias (2010) indicated, unlike the traditional training program, competency based training includes training, which is based on competency standards; it is outcome, and not input, or process focused. It is industry involved or led and flexibly delivered, involving self paced approach where appropriate. It is also performance oriented, assessed using criterion referenced rather than norm-referenced assessment and allows for the recognition of prior learning.

Skills are the proficient manual, verbal or mental manipulation of data or things that allow for the execution of well-specified tasks (psycho-motor abilities). During the implementation of a competency-based curriculum in Culinary Arts teachers develop a range of technical, personal, interpersonal, organizational and generic skills that can be applied in various contexts, both within and beyond the workplaces of the tourism and hospitality industry. These include effective communication skills, customer service skills, information processing skills, creativity, Problem-solving skills, time management, Apply cooking methods and cook basic dishes, Perform mise-en-place, Apply hygiene and food safety, food store and others.

Attitudes in Competency-Based curriculum represent a state of mind, feelings, or beliefs about a particular matter, affective abilities. Students are expected to develop values and attitudes about: the dynamic nature of the tourism and hospitality industry and the importance of being a self-motivated problem solver and life-long learner; the importance of hospitable and friendly behaviours appropriate to the industry; and the significance of ethical responsibility in the tourism and hospitality

industry (Ayoun & Moreo, 2008). At the end of their studies, students graduating from VTC offering Tourism and Hospitality courses have to demonstrate competencies related to the right attitudes for the workplace.

Skills are the proficient manual, verbal or mental manipulation of data or things that allow for the execution of well-specified tasks (psycho-motor abilities). Kong (2013) states that during the implementation of a competency-based curriculum in Culinary Arts teachers develop a range of technical, personal, interpersonal, organizational and generic skills that can be applied in various contexts, both within and beyond the workplaces of the tourism and hospitality industry. These include effective communication skills, customer service skills, information processing skills, creativity, Problem-solving skills, time management, Apply cooking methods and cook basic dishes, Perform mise-en-place, Apply hygiene and food safety, food store and others.

A good assessment method will involve clustering a number of competences to reflect a real work task. Appropriate clustering is a key way to ensure that assessments are holistic. The assessor can gather evidence and cross-reference it across a number of competence standards (Labarre, 2013).

In the context of this study, knowledge is a complex process of remembering, relating, or judging an idea or abstract phenomenon (cognitive abilities) to be competent in a range of routine kitchen tasks and activities in tourism and hospitality Industry. Students are aware that assessment is based on occupational standards and when competencies will be evaluated. In CBT assessment integrates skills, attitudes and Knowledge.

Workforce Preparedness

Cochran and Ferrari (2009) defined workplace preparedness as the competencies Necessary for a person to become a valued and skilled employee in the areas of social, cognitive, and psychological development. These authors concluded that current criteria by business and government leaders for employability tend to emphasize general behaviors, skills, and competencies. Being prepared for the workforce it refers to the level of aptitude for beginning employment. A workforce preparation is a method to introduce youth to the world of work and develop workforce skills necessary for success through active participation in learning experiences.

Hospitality curricula have been examined and analyzed from the perspectives of educators, industry professionals, and students. As hospitality education is very closely related to the hospitality industry, often a competency needs approach is used when assessing the curriculum. However, research in graduate skills has focused on management expectations and has been criticized for adopting a one-sided perspective that ignores graduate perceptions (Rahman, 2010). Needs assessment in the hospitality industry will be conducted mainly to analyze the industry expectations and students' perceived level of preparedness.

Competence

A competence is the result of a combination of knowledge and skills. This integration is demonstrated when the learner is able to achieve specific results and performances, understand what he/she does and do it autonomously. Learners in tourism and hospitality demonstrate competencies related to what they have learnt at the end of training. A graduate is competent when is capable of transferring competency based knowledge he acquired into actual practice on the ground.

Because one cannot write about competence and education without relating to the world of work, concepts such as work, profession, and vocational education Although one could speak of intellectual competencies as knowledge and skills related to thinking and processing information and although one could certainly apply aspects of the competence concept to general/liberal education, it is in the link to the (future) professional roles of learners that competence-based education has it strength (Kouwenhoven, 2003).

For the purpose of this section the term 'competence' can be defined as the capability to realise 'up to standard' the key occupational tasks that characterise a profession. A competent professional shows a satisfactory (or superior) performance. Key occupational tasks are the tasks that are characteristic for a profession (Brundrett, 2000).

Jonnaert et al. (2006) defined competence as an underlying characteristic of a person which results in effective and/or superior performance on the job. While a more detailed definition is, ''a cluster or related knowledge, skills, and attitudes that reflects a major portion of one's job (a role or responsibility), that correlates with performance on the job, that can be measured with well-accepted standards, and that can be improved with training and development'' (Parry, 1996, p. 50).

A graduate from competency based training compete well in the market based on the knowledge he acquired from competency based curriculum program and teaches others. And this is the major thrust of this study. Looking for well-trained competent personnel, who can effectively fit into the hospitality field.

Work Ethics

Practitioners in the hospitality sector rate ethics as one of the most important issues faced by the industry. Many scholars argue that the hospitality sector is open to frequent unethical practices. Managers and employees, due to intensive face-to-face interactions with clients, confront many ethical dilemmas in their day-to-day operations. Previous research confirms that a positive ethical climate nurtures a healthy organization by increasing manager and employee job satisfaction, enhancing customer experience, and increasing the organization's profit (Knani, 2014).

Work ethic is a value based on hard work and diligence. The individual is polite and helpful to customers, even those who are unpleasant. In the context of competency based trainings at the end of their trainings they develop an attitude of Being honest, having a positive attitude, taking initiative, caring about co workers, doing more than expected, being reliable and responsible, learning new skills and being a team player, takes on additional responsibilities on the job. Jaszay (2002) states that business ethics are rules by which businesses choose to live. They are not necessarily laws. They are rules that make trust between parties possible. Hospitality managers and employees are at risk when someone in the organization 'blows the whistle" and reports wrongdoing (Jaszay, 2002).

Knani (2014) states that the hotel industry practitioners ascertain the importance of developing and implementing ethics in hospitality school programs and hospitality industry practices

In tourism and hospitality industry employees understand how every service has to be delivered to customers using international standards, and this should be done ethically. Graduate from TVET Schools not only trained to demonstrate behavior and attitudes that are appropriate for the workplace but also should understand that

workplaces have policies and procedures that need to be followed. A the end of VTC training students are able to demonstrate right ethics in terms of Being honest, having a positive attitude, taking initiative, caring about co workers, doing more than expected, being reliable and responsible, learning new skills and being a team player are also examples (Sriyam, 2010).

Scott (1991) adds that Someone with a good work ethic in hospitality industry gladly takes on additional responsibilities with a strong work ethic and self-motivated, requires little supervision, and wants to continue learning and improving. A strong work ethic is part of an individual's personal values. It's based in a belief in the value of work for its own sake and not just for its rewards.

Time Management in Hospitality Industry

Time management is the process of organizing and planning how to divide your time between specific activities in service delivery with the purpose of making customers satisfied. Realistic time management and organization plans improve productivity and the quality of work.

One of the major determinants of service quality is timely and adequate response. Employees should be willing and able to deliver timely and substantive response to inquiries and complaints of customers. Service recovery and problem solving have long been recognized as important parts of services quality (Biraori, Okibo, & Wamalwa, 2014).

The relative importance of timely versus substantive response differs between different organizations. Such differences arise as a result of the relative value with which time is regarded in each of these organizations. While some customers place a higher value on time, some characterize time as a limited and scarce resource; the term saving time in fact implies reallocating time across activities to achieve greater

efficiency (Biraori et al., 2014). The marketing literature assumes that there is a relationship between time scarcity and consumers desire for goods and services that offer convenience. Certain customers have perceived time as money and tried to use it efficiently with a focus on the present. The goal is to strive towards completion without detailed scheduling. Thus, merely responding to a customer's inquiry or satisfactorily resolving a customer's complaint, a goal that is generally regarded as sufficient in its own end tends to fall short of meeting a customer's expectations of quality of service. In service organizations, these tasks should be addressed and resolved swiftly.

Is the department reliable in providing the service? Does it provide as promised? Reliability reflects a service department's consistency and certainty in terms of performance. Some service departments tend to oversell their services, leading to grand promises that misrepresent their actual potential and delivery readiness. Reliability can be affected by the request or order procedure of the service users. Service providers need to plan for the fleet available which works well when service users request for the service in advance before the actual need of a service. This applies to VTC schools training future employees to work in the hospitality industry to put an emphasis and identify competencies related to the time management towards customer satisfaction.

Future Prospects

The TVET in most of the developing countries is expected to play two crucial roles in the national sustainable development (social, economical & environmental development). The first role is to provide training opportunities and career advancement avenues for the increased school leavers. The second role is to provide skilled manpower that is needed at all levels of the economy. The skills so developed should be able to lead to self-reliance in the absence of salaried employment and enhance the industrialization process (Mohamed, Wahba, & Assurance, 2013).

During the first two days of the e-Forum (Mohamed et al., 2013) , over 20% of active contributors identified themselves as 'youth'. So the moderators asked them to describe their experiences or those of their peers or family members of the difficulties and impediments that young people face in finding work. The personal accounts that participants shared highlighted two main problems: skills mismatches and lack of job opportunities. Some older e-Forum members suggested steps that young people can take when confronted with difficulties in securing jobs (Mohamed et al., 2013).

Mohamed et al (2013) states that young participants reported three types of skills mismatches preventing smooth school-to-work transitions: lack of relevant skills, lack of information about the labour market and lack of work experience. Graduates of TVET have a need to be assured that upon successful completion of their trainings employability is guaranteed and the knowledge, skills and attitudes acquired in competency based curriculum are durable and sustainable. They should be confident to face tomorrow.

Challenges with the Implementation of CBT

Anane (2013) highlights below some challenges with the implementation of CBT and these came to the fore during the piloting stages.

Funding

Competency Based Training is an expensive form of education and training because of its emphasis on equipment, well equipped laboratories and other teaching and learning materials for training. All these come with huge cost implications especially when the number of trainees increases making it a challenge due to budgetary constraints of TVET Institutions.

Facilitation

There is then the issue of facilitation. Since CBT is learner-centered, small class sizes are preferred to enable effective use of CBT facilitation techniques. The ideal CBT class size is between 16-20 learners. Currently in most of the institutions, the average class size is hundred students. With this number, it will mean getting five different facilitators to handle each class size of 20. There is no doubt that for effective program delivery, more facilitators with relevant training to deliver CBT will be required. However, taking the current situation in our institutions into consideration where there are inadequate trained facilitators to handle CBT programmes, teacher cost will double if not triple for CBT programmes. This will have huge financial implications for the institutions (Nolder, 1990).

Secondly, unless initial training and follow up assistance is provided for these facilitators on periodic bases, there is a tendency to "teach as we were taught" and CBT trainers quickly slip back into the role of the traditional teacher. This is also compounded by the fact that not all the programmes running in the TVET institutions have gone CBT, but it is the same teachers who handle the two systems: Traditional and CBT. Switching from one role to the other poses a challenge for the teacher/facilitator. One needs a lot of commitment and determination to switch roles effectively.

Workplace Experience

One crucial component in the CBT programme is Workplace experience learning because it affords the trainee the chance to put into practice in a real work situation what he/she has been taught in order to perfect his/her competences. It is also assigned a credit value and contributes to the award of qualification. This means that all learners have to do the module on work placement to get a qualification, thus

putting a lot of pressure on industry to provide work experience places for the learners. This is a challenge because each year thousands of students from the country's institutions are striving for industrial attachments in the limited industries available. At the pilot stage the numbers were limited so they were easily absorbed by industry (Schwarz, 1994). But when all TVET institutions fully implement CBT and the numbers increase, this will certainly be a challenge. Therefore, pragmatic steps must be taken by the government and management of institutions to deal with this.

Benefits of CBT

In spite of all these challenges, there is ample evidence that the adoption of a Competency Based Training system would improve quality and relevance of TVET because of the numerous benefits. Benefits of CBT identified in (Anane, 2013) include:

- Participants will achieve competencies required in the performance of their jobs,

- Participants build confidence as they succeed in mastering specific competencies,

- Participants receive a transcript or list of the competencies they have achieved,

- Training time is used more efficiently and effectively as the trainer is a facilitator of learning as opposed to a provider of information,

- More training time is devoted to working with participants individually or in small groups as opposed to presenting lectures, and

- More training time is devoted to evaluating each participant's ability to perform essential job skills.

Competency Based Training is an industry and demand driven education and training programme, its products have a high demand on the job market. Therefore, unemployment which other programmes are grappling with is not an issue for CBT graduates. Having gone through CBT, they either go into self employment because

they have acquired the competences to set up their own businesses or are absorbed by the industries whose skills requirement they have met by nature of their training. There is no doubt that having gone through CBT, graduates do not simply provide service in the working environment; they accomplish results and this is what the world of work expects from its work force and which the CBT graduates have exhibited (Anane, 2013).

Critics on Competence-based Education

Competence-based in professional education is not undisputed. One of the dangers that critics often mention is the minor role of disciplinary knowledge, together with a haphazard taking in of pieces of disciplinary knowledge by students. (Wheelahan, 2007) in her article entitled How competency-based training locks the working class out of powerful knowledge she has used a modified Bernsteinian analysis to explore the way in which competency-based training (CBT) in vocational education and training (VET) in Australia excludes the working class and other disadvantaged social groups from access to powerful knowledge, because it denies students access to structuring principles of disciplinary knowledge.

Wheelahan (2007) argue that Bernstein's insights allow us to see that CBT fundamentally transforms the nature of knowledge by relocating it from the vertical discourse in which it is classified and relocating it closer (if not completely) towards horizontal discourse, this changes the nature of knowledge and the process through which it is acquired. Rather than integration of meanings we have integration within a context . Consequently, students are provided with access to specific content, and not the systems of meaning in disciplinary knowledge. However, the content of a discipline is the product of the discipline (and each discipline has lots of products).

Critical realism on the other hand, extends these Bernsteinian insights, because of focus on the specific content of disciplines denies students access to the collective representations that provide access into the stratified and emergent nature of the real. This absence arises from the broader ontology and epistemology of CBT, which is a form of empirical realism. By focusing on the knowledge and skills that people need to 'do' their job, and by insisting that assessment be directly aligned with these outcomes, CBT collapses the domain of the real (of generative mechanisms) and the domain of the actual (where events take place) into the domain of the empirical (that which is observable). It does so because CBT assumes that outcomes can be achieved by directly teaching to the outcomes, and in doing so ignores the complexity that is needed to create capacity, and this goes beyond the level of experience in the contextual and situated (Wheelahan, 2007).

Kouwenhoven (2003) criticises the atomisation and fragmentation of learning into measurable chunks in competence-based education .Competence involves more than the narrow description of countless tasks that are just to be 'ticked off' and should involve broader (generic) skills. Hyland (1994) criticises the atomisation and fragmentation of learning into measurable chunks in competence-based education. Callender (1992, p.21) warns that we will have people with competences rather than competent people.

Summary of the Reviewed Literature

This literature review traced some major landmarks in the growth of competency-based education (CBE), including the discussion of variables considered in this study. It discussed the tourism and hospitality industry from international to national level and their integration in TVET schools in Rwanda. The literature agrees that Competencies are identified in occupational standards; comprehensively describe

the competence a person has to achieve in order to be considered qualified in a certain field. Occupations and related occupational standards are key success factors in filling the gap between the demand side and education and training system.

Furthermore the literature explored that being prepared for the workforce it refers to the level of aptitude for beginning employment. A workforce preparation is a method to introduce youth to the world of work and develop workforce skills necessary for success through active participation in learning experiences. The literature focused only on competency-based curriculum in TVET program on tourism and hospitality program.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter discusses the research methodology employed in this study. Particularly, it explained research design used, population and sampling techniques employed, research instrument which was employed, steps that were taken to establish acceptable validity and reliability of research instrument, data gathering procedures, statistical treatment of data and ethical considerations.

Research Design

Concurrent mixed methods research approach was employed in this study. According to Gall, Gall, and Borg (2010), mixed approach applied to studies that concurrently employ both quantitative and qualitative methods rather than two or more methods that are purely quantitative or qualitative. They also maintain that to be classified as mixed method research the study must have design elements that reflect some or all of the features of both qualitative and quantitative research. The use of both quantitative and qualitative approaches, equipped the researcher with a more detailed understanding of the research problem that any approach alone (Somekh & Lewin, 20011).

While quantitative approach was used to measure relationship and differences among variables in question (Punch, 2009), qualitative approach was used to explain phenomena more deeply and exhaustively, attempting to make sense of it in terms of the meaning people bring. The qualitative data was in the form of open-ended information and documents (Merriam, 2006).

Concurrent mixed approach was used to increase validity and reliability of research instrument. Mixed approach is considered by Briggs, Coleman and Marrison

(2012) as the paradigm that systematically combines aspects of quantitative and qualitative research methods into a single study to take advantage of each paradigm's strengths.

The strengths of mixed approach include the following (Briggs et al., 2012):

- It enhances triangulation (the use of two or more methods of data collection in the study of some aspects of human behavior).

- It helps to overcome the problem of generalization especially in qualitative research.

- A combination of methods may felicitate a better understanding of the relationship between variables.

- Finally, it allows appropriate emphasis; especially numerical findings can be made clear by open ended information obtained through qualitative approach.

Population and Sampling Techniques

The population of this study was 12 public Vocational Training Centres offering tourism and hospitality courses as shown in Table 8, three hundred eight five (385) graduates from those VTCs and finally Hotel Managers employing them in Southern Province, Rwanda.

Purposive sampling techniques were used to select the sample VTC from the population. In each District one public VTC offering tourism and hospitality was picked. The southern Province has 8 districts this means that the total sample was supposed to be   composed of 8 public VTCs. The focus was given to public VTCs. It was found that in all districts no one has more than one public VTC, only 6 Districts were found to have Public VTCs offering tourism and hospitality courses, therefore The VTCs that were involved in the study were: Integrated Polytechnic Regional

Center (IPRC) South VTC, Mushubati VTC, Cyanika VTC, Kiyonza VTC, Kigese VTC and Mpanda VTC

Cluster sampling technique was used such that graduates who finished their studies for Level 3 in the sampled VTCs were involved in the study. A total number of 179 graduates from six VTCs offering Tourism and Culinary Arts programs under Competency-Based Curriculum from 2012 to 2016 and three hotels managers interviewees who employed them participated in this study.

Table 8

List of Accredited VTC Offering Tourism and Hospitality Courses in Southern Province

s/n	Names	District	Trades
1	Notre Dame Bon Esperance (NDBE) Gisagara VTC	Gisagara	Culinary Arts, Hairdressing-Aesthetics , Welding
2	Don Bosco Centre De Formation De Jeunes Rango VTC	Huye	Carpentry, Culinary Arts, Masonry,
3	Rwabuye Vocational Technical center (VTC)	Huye	Culinary arts, Domestic Electricity, Hairdressing-
4	Integrated Polytechnic Regional Center (IPRC) South VTC	Huye	Carpentry, Culinary Arts, Domestic Electricity, Food and Beverage, Front Office, Housekeeping, masonry, Welding, Plumbing
5	Muhanga Technical Center (MTC) / VTC	Muhanga	Culinary Arts, Hairdressing-Aesthetics ,Masonry, Moto Vehicle Engine Mechanics
6	Mushubati VTC	Muhanga	Culinary Arts, Hairdressing , Masonry, Moto Vehicle Engine Mechanics, Tailoring
7	JAM FRED NKUNDA VTC	Muhanga	carpentry, Culinary Arts, Hairdressing, Masonry, Moto Vehicle Engine Mechanics, Welding, tailoring
8	Cyanika VTC	Nyamagabe	Culinary Arts, Food processing, leather craft, Tailoring
9	Kiyonza Vocational Technical center (VTC)	Nyaruguru	Carpentry, Culinary Arts, Masonry, Tailoring
10	VTC Kigese	Kamonyi	Carpentry, Culinary Arts, Masonry, Welding, Tailoring
11	Ecole Scolaire Gitisi /VTC	Ruhango	Culinary Arts, Hairdressing , Masonry, , tailoring
12	Mpanda VTC	Ruhango	Carpentry, Culinary Arts, Domestic Electricity, masonry, Welding, Tailoring

Research Instruments

The following research instrument was used to gather data from graduates, and managers from hospitality institutions who receive graduates for employment. These are:

Questionnaire: One self administered questionnaire was used for graduates. The questionnaires were constructed by the researcher with the help of research supervisors and the university statistician.

Focus Group Discussion (FGD): Three round tables Focus Group Discussion with graduates in Culinary Art who have finished Level 3 in Tourism and Hospitality in Vocational Training centres Southern Province, Rwanda, in order to establish their views on the implementation of competency based curriculum and workforce preparedness.

Interview Schedules (IS): This involved managers from hospitality institutions who employed graduates from VTCs offering Culinary Art in order to find out their attitudes on their preparedness and the quality of the curriculum they went through.

Observation Schedules: The researcher entered in class where teaching and learning was taking place to observe the extent to which the competency based curriculum was implemented.

Document Analysis: With the help of Headmasters, the researcher looked into a number of modules to see how competency based in curriculum is delivered and its impact on workforce preparedness.

Validity and Reliability of Research Instruments

Validity means the individual's score from an instrument makes sense, are meaningful and enable the researcher to draw a good conclusion from the sample

being studied (Creswell, 2008). Reliability, on the other hand, is considered to be the extent to which the research findings can be replicated, meaning, if the study is repeated, it will yield the same result (Merrian, 2009). With this regards, several procedures were used to increase acceptable validity and reliability of research instrument.

First, through expert judgment, the experienced professors at the University of Eastern Africa, Baraton looked into the research instruments against research questions and subsequent hypotheses and commented where necessary adjustment was deemed necessary. Collections were made accordingly by adjusting the content of questionnaire, interview schedules and Focus Group Discussion contents to suit the need of research questions. This was done before the pilot study and the final data collection.

Secondly, a pilot study was conducted in Eastern Province, IPRC East which was not part of the study sample and 72 respondents participated. The Cronbach's alpha coefficients obtained for each section of the questionnaire are as follows: Competence - .852, Future Prospects - .924, Work Ethics - .839, Time Management - .891, Identification of Competencies - .710, Teaching-learning Process - .910, Learning Resources - .864, and Assessment - .850. All reliability coefficients were above the set cut-off point of .70.

Data Gathering Procedures

Before actual data collection, the researcher filled and submitted research ethics clearance form with a soft and hard copy of the research proposal to the chairperson of the research ethics committee at the University of Eastern Africa, Baraton. Upon clearance from this committee, the Director of Graduate Studies and

Researcher wrote letters to the Ministry of Education, Rwanda, for permission to collect data from sampled VTCs is Southern Province.

Upon receiving the permission from the Ministry of Education, Rwanda, the researcher moved from one school to another to administer data collection procedures for a period of twenty days. The researcher reported to the VTCs Heads' Offices for permission to collect data through observation and to request a list and contacts of graduates who graduated in culinary arts under the implementation of competency based curriculum in tourism and hospitality.

The researcher started with data collection in observation how teaching-learning process took place in different classes. Upon receiving the list and contacts of graduates from VTCs offering courses in Culinary Arts level three, the researcher continued with data collection trough questionnaires and focus group discussions. The researcher contacted the graduates through telephones calls and used a strategy of using their former class representatives to increase the number of participants; some head teachers played a big role to find them. As they were coming from different places, a venue was selected for Focus Group Discussion and the money they used for transport was reimbursed. Interview Schedules with Hotel Manager who employed them were conducted in the morning while Focus Group Discussions were conducted in the afternoon. After every session the researcher was giving thanks to respondents.

Statistical Treatment of Data

Data from interview schedules, observation schedule and Focus Group Discussions and document was coded, analyzed and arranged using thematic approach. Descriptive statistics was used to determine mean scores and standard deviations in question one and two. The null hypothesis was analyzed through Pearson Product moment correlation coefficient. To determine the indicators of

curriculum implementation that best determine workforce preparedness, multiple linear regression analysis was done. In every step, the university statistician was consulted for advice.

In research question one, selected graduates from VTCs offering Tourism and hospitality courses in Culinary Arts were involved in Focus Group Discussions to give their views on the extent to which the competency-based curriculum in TVET program on tourism and hospitality is implemented in the vocational training centres in the areas of identification of competencies, teaching-learning process, learning resources, and assessment. The mean score of questionnaire responses by graduates was measured in four point scales, the cut-off point agreement or non-agreement:

3.50-4.00 = Agree / Very Good

2.50-3.49 = Tend to Agree / Good

1.50-2.49 = Tend to Disagree / Fair

1.00-1.49 = Disagree /Poor

Research question number two on graduates' perception of their workforce preparedness in terms of competence, future prospects, work ethics and time management was also analyzed using Descriptive Statistics to determine mean scores. Observations schedules in different classes helped to find out how competency based curriculum is implemented in VTCs offering tourism and hospitality courses in Culinary Arts.

Research question number three regarding if there is a significant relationship between the competency-based curriculum implementation and the graduates' workforce preparedness was analyzed through Pearson Product moment correlation coefficient. Research question number four on indicators of competency-based

curriculum implementation best determine workforce preparedness; multiple linear regression analysis was used.

Research number five was answered through the interview schedules, focus group discussions and document analysis.

Ethical Considerations

The researcher adhered to ethical principles in terms of, intellectual property, confidentiality, legality, honesty, and non-discrimination policy. The treatments of the aforementioned components were treated as follows:

Intellectual property: Parents were honoured, copyrights, and other forms of intellectual property. All rules guiding acknowledgment of literature sources was be observed.

Confidentiality: Confidential communications were protected, such as papers or grants submitted for publication, personal records, *etc*. Respondents of this research were left to decide the best way of registering their views. No harm whatsoever was imposed on the respondents and the researcher remained to be solely responsible with the collection of information, analyzing and reporting.

Legality: Relevant laws of the institutions and governmental policies were obeyed. In order to achieve this, the researcher sought permission from relevant bodies: The researcher obtained clearance from the UEAB Research Ethics Committee and the director of research and graduate studies (UEAB) and lastly the Ministry of Education in Rwanda before data collection issued the Research Clearance No : MINEDUC/S&T/429/2017 to carry out this research.

Non-Discrimination: Discrimination against colleagues or in this matter was avoided, respondents on the basis of sex, race, ethnicity, or other factors that are not related to their scientific competence and integrity.

Anonymity: The researcher adhered to the code of research ethics, not to expose or mention names of respondents in any way as this can result to sabotaging the flow of information and create unnecessary haddocks to future research.

CHAPTER FOUR

PRESENTATION OF FINDINGS, ANALYSIS AND INTERPRETATION

This chapter presents the results of graduates who graduated from Tourism and Hospitality VTC in Culinary Arts level three under Competency Based Curriculum implementation in Southern Province, Rwanda. The chapter also presents the results from their employers on their performance and preparedness. A total number of 179 graduates from six VTC offering Tourism and Culinary Arts programs under Competency-Based Curriculum and six hotels managers, interviewees participated in this study.

Demographic Information of Respondents

The sample of this study consisted of 179 graduates out of 385 who graduated in public VTCs offering courses related to Tourism and Hospitality in culinary Arts level three under competency Based Curriculum in Southern Province, Rwanda.

Respondents' Gender

Table 9 presents the descriptive background of gender of respondents. Majority of graduates who participated in this study were male (57%) followed by Female (43%). This shows that majority of respondents were male. It shows that there is a need of doing the awareness campaign for female to attend TVETs.

Table 9

Gender of Respondents

		Frequency	Percent
Valid	**Male**	102	57.0
	Female	77	43.0
	Total	**179**	**100.0**

Respondents' Age

Table 10 shows that as regards to age, the majority of respondents were between 21-25 years old (54%), followed by 20 years old and below age group which is (25.1%), the least were those within 26-30 years old (17.3%) and 31-35 years old (2.2%). Only (.6%) was between 36 years old and above. This shows that VTCs are attended by young people. This implies that the workforce will have graduates who will their strength and produce much. They have a room for further studies.

Table 10

Age of Respondents

		Frequency	Percent
	20 and below	45	25.1
	21 - 25 years old	98	54.7
Valid	26-30 years old	31	17.3
	31-35 years old	4	2.2
	36 and above	1	.6
	Total	179	100.0

Marital Status of Respondents

The table below shows the marital status of the respondents who graduated in VTCs offering the programs of Tourism and Hospitality in Culinary Arts under Competency-Based Curriculum in Southern Province, Rwanda. The majority (86%) were single while (14%) married. This majority is explained by the fact that graduates from level 3 were young.

Table 11

Marital Status of Respondents

		Frequency	Percent
		Frequency	Percent
Valid	Single	154	86.0
	Married	25	14.0
	Total	179	100.0

Respondents from Selected VTCs in Southern Province

Table 12 tabulates graduates from selected VTCs offering Culinary Art Level three in Southern Province. The majority of graduates in this study (31.3%) were from Mpanda VTC, this is because Mpanda VTC is among the first VTCs which started offering tourism and hospitality courses in the Province. Respondents graduates from IPRC South were (20.1 %) followed by graduates (16.8 %) from Kigese VTC. Graduates from Cyanika VTC were (15.1%) while graduates from Kiyonza VTC were represented by (11.2%) and finally Mushubati graduates were (5.6%). Most of them are working in Hotels and Restaurant located in Southern Province and Kigali City.

Table 12

Graduates from Selected VTCs

		Frequency	Percent
	Mpanda VTC	56	31.3
	Kigese VTC	30	16.8
Valid	**Mushubati VTC**	10	5.6
	IPRC South VTC	36	20.1
	Kiyonza VTC	20	11.2
	Cyanika VTC	27	15.1
	Total	179	100.0

Status of VTCs where Respondents Graduated from

The table below shows that respondents when they were at school (75.4%) were day students while (24.6 %) were boarding students. This indicates that most of students in VTCs in Southern Province after classes they go back in their families.

Table 12

Status of VTC where Respondents Graduated from

		Frequency	Percent
Valid	Day	135	75.4
	Boarding	44	24.6
	Total	179	100.0

Year of Graduation of Respondents

Table 13 shows that majority of graduates (39.1%) who participated in this study graduated in 2015 followed by those who graduated in 2016, (33.5%). This is an indicator of the result of the awareness campaign which was done by the government to enrol in TVETs from 2014 by Workforce Development Authority in Rwanda.

Table 13

Year of Graduation of Respondents from VTCs

		Frequency	Percent
	2016	60	33.5
	2015	70	39.1
Valid	2014	33	18.4
	2013	16	8.9
	Total	179	100.0

Implementation of Competency-Based Curriculum

Research question 1. *To what extent is the competency-based curriculum in TVET program on tourism and hospitality implemented in the vocational training centres in the following areas:*

- *Identification of competencies*

- *Teaching-learning process*

- *Learning resources*

- *Assessment*

Analysis employed descriptive statistics. Mean scores of various items were interpreted as follows:

3.50-4.00 = Agree / Very Good

2.50-3.49 = Tend to Agree / Good

1.50-2.49= Tend to Disagree / Fair

1.00-1.49= Disagree /Poor

Identification of Competencies

Table 14 presents results of the mean rating on identification of competencies. It shows how graduates of VTCs offering Tourism and Hospitality courses were aware on how competencies to be achieved were identified and made known. The identification of competencies in CBT system is supported by the study of (Anane, 2013) which stipulated that Competencies to be achieved are carefully identified, verified and made public in advance.

Competencies are identified in occupational standards; comprehensively describe the competence a person has to achieve in order to be considered qualified in a certain field. It specifies the standards of performance that the trainees are expected to achieve in their work, and knowledge and skills they need to perform effectively.

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Table 14

Descriptive Statistics on Identification of Competencies

	N	Mean	Std. Deviation	Interpretation
Competencies to be achieved were derived from occupational needs of the industries.	179	3.06	.660	Tend to Agree
Competencies to be achieved were repeatedly and clearly explained	179	2.98	.678	Tend to Agree
Competencies to be achieved were updated continuously to meet the needs of the industries.	179	2.93	.692	Tend to Agree
Competencies to be achieved were specific and precise.	179	2.90	.758	Tend to Agree
My school and the industries worked together to identify the competencies needed in the workplace.	179	2.74	.794	Tend to Agree
The industries positively invited us to practice the competencies identified to be achieved.	179	2.82	.699	Tend to Agree
Identification of competencies	**179**	**2.9041**	**.58909**	**Tend to Agree**

Respondents tended to agree with all six statements of Identification of Competencies in Table 14, (M= 2.9041, SD= .58909) which means that they at least leaned in the direction of agreeing. Particularly, graduates from VTCs offering Tourism and Hospitality courses in Southern Province, Rwanda tended to agreed that Competencies to be achieved were derived from occupational needs of the industries (M=3.06, SD=.660), this is in harmony with (Anane 2013, p.45) wrote : "Competencies are carefully selected and satisfactory completion of education and training is based on achievement of all specified competencies ".

Competencies to be achieved were repeatedly and clearly explained (M=2.98, SD=.678), Competencies to be achieved were updated continuously to meet the needs of the industries (M=2.98, SD=.692), Competencies to be achieved were specific and

precise (M=2.90,SD=.758), My school and the industries worked together to identify the competencies needed in the workplace (M=2.74, SD=.794), occupational standards define the competencies of a worker according to the requirements in the labour market. Furthermore, occupational standards comprehensively describe the competence a person has to achieve in order to be considered qualified in a certain field. Competence includes the entire range of skills, knowledge and attitude necessary to perform a specific job (Kufaine & Chitera, 2013).

The industries positively invited us to practice the competencies identified to be achieved (M=2.82, SD=.699). This is supported by Norton in (Anane, 2013, p.145) who argues that it specifies the standards of performance that the trainees are expected to achieve in their work, and knowledge and skills they need to perform effectively.

During an interview with one Hotel Manager in Southern Province he confirmed that they give opportunities to trainees to come and practice competencies they have acquired but denied the invitation from VTCs to discuss on competencies to be identified, he said: '' My hotel allow trainees from Tourism and Hospitality schools to come and do practical exercises in the kitchen, housekeeping and at front office, they are our future employees but those schools don't invite us to discuss on competencies needed in workforce, there is a need to work on this because we can tell the story, we are on the ground. I have never been called to give my view on the competencies to be identified in this area. I have experience and I can help and give my contribution '' (Interview Schedule 2). Another one added: ''we are not called probably they don't need us!'' (Interview Schedule 3) This implies that Hotel Managers are ready to give their contribution in competencies identification.

Occupations and related occupational standards are key success factors in filling the gap between the demand side and education and training system.

Occupational standards reflect the actual workplace situation related to current and future requirements. Demand oriented TVET uses occupational standard as the target or expected outcome for TVET delivery. Accordingly, occupational standards are key factors in linking and matching the world of work with the world of education and training (Moe, 2007).

Through Focus group discussion graduates from VTCs offering courses related to Culinary Arts gave their views on the Identification of Competencies. One graduates for instance maintained that : " Our teacher of Food Production used to tell us sometimes when he was absent in class that he was invited to be part of curriculum development in Kigali and was emphasizing to have hands on skills in his course especially in cooking '' (GRS1, 20/4/2017). Another graduate said ''competencies to be achieved were not repeatedly and clearly explained by all lecturers some did and others did not, but I was inspired to hear what I have to focus on during my learning'' (GHS4, 13/4/2017).

Figure 3. Graduates during focus group discussion session.

Figure 4. Graduates during focus group discussion session.

Graduates views on the identification of competencies were further expressed in terms of their rights. One graduate for instance, had this to say during focus group discussion session ''when our parents pay school fees for our studies we have right to know what kind of competencies I need to show at the end of my studies so that I can get prepared'' (GKS10, 24/4/2017). Another graduate contended that ''competencies to be achieved were not hundred per cent specific and precise'' (GRS8, 20/4/2017).

These views are in harmony with identification of competencies in TVETs programs. However, competencies to be achieved by the trainees need to be publicized in advance for effective implementation of competency-based curriculum. In competency-based instruction, trainees are informed about the criteria and attitudes that are important to the occupation.

Furthermore, competencies to be achieved need to be specific, precise and stated in written form. Dadi (2014) indicates that, one of the characteristics of competency based instruction is that whatever students learn is based on specific, precisely stated outcomes that have been recently identified as being essential for successful employment in occupation for which the trainee is being trained.

Teaching and Learning Process

Table 15

Descriptive Statistics on Teaching and Learning Process

	N	Mean	Std. Deviation	Interpretation
The role of instructors was the facilitator of learning	179	3.30	.754	Tend to Agree
In teaching learning activities knowledge, skill and attitude were integrated	179	3.32	.682	Tend to Agree
Teaching learning activities were interactive and engaging	179	3.34	.678	Tend to Agree
Hands on activities occurred immediately after presentation of new topic	179	3.28	.695	Tend to Agree
Learning activities took place in several real situations	179	3.32	.666	Tend to Agree
I was learning at my own pace	179	3.29	.699	Tend to Agree
I demonstrated my competencies during learning	179	3.30	.747	Tend to Agree
Learning was field cantered using realistic work situation	179	3.26	.743	Tend to Agree
Instruction of each task package was supported by practice	179	3.25	.700	Tend to Agree
Incorrect practices in instruction for each task package was detected and corrected	179	3.20	.750	Tend to Agree
Learning activity was reinforced until competency was achieved	178	3.20	.721	Tend to Agree
Teaching-learning process	**179**	**3.2756**	**.53950**	**Good**

This sub research question called for establishment of graduates' attitude toward teaching and learning process before their graduation. With this regard, graduates were needed to respond to eleven items as reflected in Table 15. It is worth noting that graduates' responses to all eleven items ranged between 3.20 and 3.30 meaning tend to agreement. This implies that graduates under investigation had positive attitude toward

teaching and learning process in VTCs where they graduated from. Thus, the way an individual thinks, perceives, feels, values and acts toward will definitely influence his or her achievement in the future.

Particularly, graduates tended to agree that the role of instructors was facilitate of learning (M=3.30, SD=.754). This is supported by what I observed during observations in different classes that teaching and learning were interactive and engaging and the instruction was supported by practice.

In teaching learning activities knowledge, skills and attitude were integrated (M=3.32, SD=.682), Teaching learning activities were interactive and engaging (M=3.34, SD=.678). Teaching and learning in any curriculum require common goals, shared responsibility and accountability between teachers and learners, and supportive or enabling environments to maximize success in learning (Sullivan, 2014). This is in harmony with Thompson, Bell, Andreae, and Robins (2013) who contend that It is important that teachers provide ample time for discussion/dialogue and clarification of concepts to be learned. They also need to encourage and help the learner use their own knowledge and ideas to find possible solutions. One of the most effective teacher strategies for guiding the learner to discover how to proceed or act is called Socratic questioning.

Hands-on activities occurred immediately after presentation of new topic (M=3.28, SD=.695). The focus group discussion supported these findings, in view of this, one focus group discussion participant indicated: ''when I was studying at VTC I liked our teacher who taught us Hygiene and Food Safety. I mastered competencies related to maintain workplace hygiene, Clean, sanitise and store equipment and applying food safety procedures, he was engaging the entire class in his way of teaching, he was nice'' (GHS9, 13/4/2017).

Learning activities took place in several real situations (M=3.22, SD=.666), I was learning at my own pace (M=3.29, SD=.699), I demonstrated my competencies during learning (M=3.30, SD=.747). This implies that competency-based TVET instruction normally allows students to acquire the specific competencies more or less at their own pace of learning through variety of self-paced learning strategies and materials and frequent feedback (Dadi, 2014).

Learning was field cantered using realistic work situation (M=3.26, SD=.743), Instruction of each task package was supported by practice (M=3.25, SD=.700), Incorrect practices in instruction for each task package was detected and corrected (M=3.20, SD=.750), Learning activity was reinforced until competency was achieved (M=3.20, SD=.712). In competency based instruction, attention should be given to incorrect practices which need to be corrected immediately during presentation of the subject matter or during conducting practices.

Sullivan (2014, p. 56) briefly outlines the various domains and how a competency-based curriculum may be implemented and the strategy that may be chosen saying that "a teacher has to demonstrate the expected way to perform a given skill and allow learner to practice for a while, and then ask for return demonstration of that skill." In the education field, teachers should arrange for sufficient practical experiences requiring skill performance of the competencies under direct supervision. Create a valid and reliable assessment tool for use in determining competency in skill demonstration. Support learner-led discussions, structure debates to address practical situations.

Learning Resources

In response to this sub question, graduates were needed to respond to eight items in the questionnaire. As Table 16 indicates, graduates tended to agree that Practical materials for instruction were appropriate for the tasks (M=3.02, SD=.742),

Practical materials were available for every task (M=2.88, SD=.907), Kemp (2000) mentions the use of concrete objects and materials in learning process by constructing learner's own meaning among themselves. The learning process requires learners to ask their own questions and be more sensitive to the environment. It involves rich educational activities whereby learners make decisions and ask critical questions. The use of self-evaluation, personal methods of learning and maximum discussion and communication should thus be applied.

Kitchen equipment and utensils were relevant to the occupation in the world of work (M=2.59, SD=.940), Learning materials were effectively utilized during instruction (M=2.98, SD=.817), Learning materials were comprehensive (M=2.87, SD=.948), Appropriate equipment and technology were selected for particular cooking methods (M=2.72, SD=.869) . This was supported by an observation schedule in one VTC, where the teacher, during his practical students were following with attention and the material he was using were appropriate for the lesson. Specifically, the teacher had to say to his students: ''I'm happy that this year the headmaster has put in the school budget all learning material and equipment for practical we shall need in the kitchen this year that why you see today that we have everything'' (Observation Schedule 1).

Table 16

Descriptive Statistics on Learning Resources

	N	Mean	Std. Deviation	Interpretation
Cooking machines ,equipment for kitchen were available and well organized	179	2.44	.735	Tend to Disagree
Practical materials for instruction were appropriate for the tasks	179	3.02	.742	Tend to Agree
Material for Mise en Place were available and sufficient	179	2.17	.851	Tend to Disagree
Practical materials were available for every task	179	2.88	.907	Tend to Agree
Kitchen equipment and utensils were relevant to the occupation in the world of work	179	2.59	.940	Tend to Agree
Learning materials were effectively utilized during instruction	179	2.98	.817	Tend to Agree
Learning materials were comprehensive	179	2.87	.948	Tend to Agree
Appropriate equipment and technology were selected for particular cooking methods.	179	2.72	.869	Tend to Agree
Learning resources	**179**	**2.7088**	**.54676**	**Good**

The teacher divided students in 2 groups the class was interacting and engaging up to the end. I tasted the food they prepared it was delicious.

Learning resources are any tool that helps teachers teach and students learn in our context of competency based TVET training. Teaching and learning in competency based TVET training involves a variety of teaching methods supported by teaching aids, adequate materials, space and equipment for instruction. One of the characteristics of competency based instruction program is the effective utilization of

learning resources. The purpose of organizing the use of learning resource is to assist all students in the development of marketable skills. In competency based instruction system, each student is given a copy of the job title competencies.

A graduate from VTC offering Culinary Arts during Focus Group Discussion, for instance had this to say: '' I graduated in 2014 the first trimester the school did not have enough materials for practical and learning but in the second trimester WDA sent equipments for kitchen, from that time learning materials were available at my school'' (GHS9, 13/4/2017).

However, respondents tended to disagreed that their Cooking machines, equipment for kitchen were available and well organized (M=2.44, SD=.735) and Material for Mise en Place were available and sufficient (M=2.17, SD= .851). This implies that VTCs are still having challenges to have enough equipments and skilled teachers to employ them. This has been supported during the interview where a Manager of a three stars Hotel said: ''My hotel allow trainees from Tourism and Hospitality schools to come and do practical exercises in the kitchen, housekeeping and at front office, they are our future employees. These schools are still lagging behind on the side of equipments. It is true , some of our employees who graduated from those VTCs sometimes they don't know how to manipulates cooking machines and some materials in the kitchen, I have ordered to give them some trainings before they start officially that, before they start working. Some headmasters are requesting partnership with my hotel to do practical in my Hotel'' (Interview Schedule 2).

This supports the view that there is a serious problem in implementing competency based TVET curriculum due to shortage teaching learning materials for practical activities.

Figure 5. During interview at Huye District with a hotel manager.

The function of learning resources is to provide a basis for students' learning experiences. Learning resources include not only textbooks, workbooks and audio-visual teaching aids produced by the Education and Manpower Bureau or other organizations, but also web-based learning materials, computer software, the Internet, the media, libraries, kitchen equipments, resources in the natural environment, and people. All of these should be drawn upon to help students to broaden their learning experiences, and to meet their different learning needs. If used effectively, they will help students to: consolidate what they have learned; extend and construct knowledge for themselves; and develop the learning strategies, generic skills, values and attitudes they need and thus lay a solid foundation for lifelong learning (Guide, 2014).

In views of this Thompson et al. (2013) considers learning materials to be well appropriate for the tasks and available for every task to be relevant to the occupation in the world of work and materials and to be effectively utilized during instruction.

As it is tabulated in table 16, it shows that learning resources in VTCs offering Tourism and Hospitality courses in Southern Province is good.

Assessment

Table 17

Descriptive Statistics on Assessment

	N	Mean	Std. Deviation	Interpretation
Assessment engaged me in applying knowledge in the same way as they are used in the real world outside of school.	179	2.85	.720	Tend to Agree
Assessment engaged me in applying skills in the same way as they are used in the real world inside of school.	179	2.93	.716	Tend to Agree
Assessment was continuous	179	2.98	.786	Tend to Agree
Assessment was based on demonstration of competency	179	2.92	.799	Tend to Agree
I was aware that assessment was based on occupational standards.	179	2.81	.799	Tend to Agree
I was aware of how and when competencies will be evaluated	179	2.72	.795	Tend to Agree
Assessment integrated knowledge, skills and attitude.	179	2.78	.802	Tend to Agree
Immediate feedback was provided to us on performance after each practice.	179	2.74	.767	Tend to Agree
I was allowed to practice tasks correctly before being evaluated.	179	2.60	.775	Tend to Agree
Assessment	**179**	**2.8138**	**.61534**	**Good**

Assessment engages students in applying knowledge in the same way as they are used in the real world outside and inside of school. To determine whether a learner has imbibed what he/she has learnt, an assessment is organised for all learners. The assessment is based on the learning outcomes specified in the learning unit specifications developed for each course.

The assessment of competencies in VTCs offering Culinary Arts in Southern Province, Rwanda is good as it is tabulated in table 17. This question called upon graduates from VTCs to evaluate how they were assessed in class. ''Assessment engaged me in applying knowledge in the same way as they are used in the real world

outside of school'' (M=2.85, SD=.720), Assessment engaged me in applying skills in the same way as they are used in the real world inside of school (M=2.93, SD=.716).

During the Focus Group discussion two graduates from VTCs reacted on the assessment they passed through when they were at school. For instance one had to say: '' I still remember a teacher who taught us Food Storage he was emphasizing on how to select the type of food to be stored, how to maintain storage area , storage conditions, store food and apply proper storage procedures. When I started my first job , I was given to be the store manager where I took the opportunity to apply those skills I acquired………. , I'm happy'' (GRS2, 20/4/2017). The second graduate added: ''where I graduated from, we have spent almost one trimester and the assessment was only theory. Our school had financial problems'' (GNS2, 6/4/2017).

Figure 6. Graduates during focus group discussion.

In view of this, (Mcclarty & Gaertner, 2015) consider CBT assessment as the process of collecting evidence of a learner's performance, upon which an assessor judges whether or not, or the extent to which a learner has met the performance requirements of the learning outcome laid in a particular unit and then making a

decision, based on these judgements as to whether a learner has achieved the learning outcome as a whole or not.

In other words, it is the process of measuring learner's skills, knowledge and understanding against the standards (occupational standards) laid down for a particular unit. If a learner can show, by generating sufficient evidence of their competence, that they meet the standards, they qualify for that unit. Therefore CBT assessment measures whether a learner is competent or not competent. In CBT the assessment is continuous and based on actual demonstration of competency.

Table 17 shows that assessment was continuous (M=2.98, SD=.786), Assessment was based on demonstration of competency (M=2.92, SD=.799), I was aware that assessment was based on occupational standards (M=2.81, S=.799), I was aware of how and when competencies will be evaluated (M=2.72, SD=.795), Assessment integrated knowledge, skills and attitude (M=2.78, SD=.802), Immediate feedback was provided to us on performance after each practice (M=2.74, SD=.775), I was allowed to practice tasks correctly before being evaluated (M=2.60, SD=.775). In response to the question related to assessment during the Focus group discussion other three graduates mentioned this. ''I was preparing for exams because I needed marks. I did not know that it had a purpose of preparing us to work'' (GNS4, 6/4/2017). After a long discussion a second graduate emphasized that: ''2/4 of our teachers told us that each assessment prepared us to the workforce'' he continued talking to me directly saying ''I'm sending you according to my experience I went through now go and tell those teachers to assess our little brothers according to what is needed in the workforce'' (GHS1, 13/4/2017).

This implies that some lectures still have a problem in assessing their students in competency based curriculum approach. The primary difference between

competency based training and traditional program is that, in competency based education, achievement is constant and time is variable. A learner is expected to be able to demonstrate his achievement of the task or competency by performance. It is stressed that some level of industry involvement is important in hospitality curriculum assessment as the hospitality education is heavily linked to the industry. The viewpoints of educators solve this problem as industry experience is a prime requirement for jobs in the hospitality academic world.

Allias (2010) indicated competency based training includes training which is based on competency standards; it is outcome, and not input, or process focused. It is industry involved or led and flexibly delivered, involving self paced approach where appropriate. It is also performance oriented, assessed using criterion referenced rather than norm-referenced assessment and allows for the recognition of prior learning. In CBT student are aware that assessment is based on occupational standards and when competencies will be evaluated and assessment integrates knowledge, skills and attitudes.

In summary competency-based curriculum implementation was rated good by graduates from VTCs offering Culinary Arts but observation schedules and Focus group discussions analysis revealed some challenges in the implementation of competency-based curriculum implementation related to lack of learning resources and equipments in the kitchen. Furthermore the findings revealed that teachers in VTCs need to upgrade their skills on how to assess students.

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Workforce Preparedness

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Research question 2. *What are the perceptions of the trainees of their*

workforce preparedness in terms of:

- *Competence*

- *Future prospects*

- *Work ethics*

- *Time management*

Analysis employed descriptive statistics. Mean scores of various items were

interpreted as follows: 3.50-4.00 = Agree/Very Good, 2.50-3.49= Tend to

Agree/Good, 1.50-2.49 = Tend to Disagree/Fair and 1.00-1.49 = Disagree/Poor.

Findings from Focus Group Discussions and Interview Schedules were considered

while interpreting.

Competence

Table 18 presents results of the mean rating on how graduates from VTCs

offering Tourism and Hospitality courses in Southern Province, Rwanda are

competent at their work. Table 18 clarifies that they are in agreement zone (M=3.12,

SD=.434).

Table 18 indicates that respondents generally rated their competence at work

as good (M=3.12., SD=.434). However, they are still having languages barriers in

English, French and Swahili during their communication (M=1.60, SD=.623).

Graduates from VTCs offering Tourism and Hospitality courses in Culinary Art,

Southern Province in Rwanda are facing a problem of communicating effectively to

customers in the work place (M=1.97, SD=.741). During observation the researcher

noticed that all teachers were teaching in **KINYARWANDA.**

Table 18

Descriptive Statistics on Competence

	N	Mean	Std. Deviation	Interpretation
I maintain health and safety, and sustain the environment in the workplace	179	3.58	.616	Agree
I communicate effectively to customers in the workplace	179	1.97	.741	Tend to Disagree
I apply computer skills in the workplace	179	2.78	.647	Tend to Agree
I have skills, knowledge and attitudes required to apply hygiene and food safety in the workplace	179	3.30	.692	Tend to Agree
I possess skills, knowledge and attitudes required to handle and store food accordingly.	179	3.45	.688	Tend to Agree
I have the skills and knowledge required to use kitchen equipment and tools, to prepare Mise-en-place of the different ingredients, using the proper cutting and preparation techniques.	179	3.51	.665	Agree
I have the skills and knowledge required to use basic cooking methods and cook basic dishes	179	3.48	.698	Tend to Agree
I communicate fluently in English, French and Swahili	179	1.60	.623	Tend to Disagree
I am able to create and manage a small business related to culinary art	179	3.19	.693	Tend to Agree
I am capable of transferring competency based knowledge I acquired into actual practice on the ground	179	3.44	.712	Tend to Agree
I compete well in the market based on the knowledge I acquired from competency based curriculum program	179	3.41	.740	Tend to Agree
I feel I need more knowledge to better my professional skills	179	3.54	.697	Agree
I am capable to teach others the skills I acquired from competence based curriculum	179	3.44	.688	Tend to Agree
I am able to offer my skills/product anywhere in the world	179	3.07	.590	Tend to Agree
I have learned public relations skills to collaborate with the industries.	179	3.04	.616	Tend to Agree
Competence	**179**	**3.1207**	**.43440**	**Good**

The researcher's first observation was on Food Storage, students were asking their questions in Kinyarwanda and responses from their teachers were also in Kinyarwanda. What surprised me the teacher was writing on the blackboard what he was teaching in English. I realised that the teachers do not communicate well in English (Observation Schedule 2, 3, 4).

The qualitative data obtained from Graduates during Focus Discussion, for instance one had to say: ''we are not good in speaking English because our teachers did not give an emphasis on it'' (GKS7, 24/4/2017).

Another one mentioned that: ''when it comes to practical I don't have any challenge, I perform well and convince people, but when it comes to speak in English I feel that I'm not confident enough. For me I can give a suggestion, school Manager have to increase number of hours in languages this will help future graduates to be more comfortable in tourism and Hospitality Industry'' (GRS12, 20/4/2017).

Figure 7. Focus group discussion with graduates.

Sriyam (2010) proposed that customers, expectation is formed by many uncontrollable factors which include previous experience with other companies, and their advertising, customers, psychological condition at the time of service delivery, customer background and values and the images of the purchased product.

In addition, Biraori et al. (2014) stated that customer service expectation is built on complex considerations, including their own pre-purchase beliefs and other people's opinions. Customers, expectation related to different levels of satisfaction, it may be based on previous product experiences, learning from advertisements and word-of-mouth communication.

The need to satisfy customer for success in any commercial enterprise is very obvious. The income of all commercial enterprises is derived from the payments received for the products and services to its external customers. Customers are the sole reason for the existence of commercial establishments. For customer satisfaction, it is necessary to establish and maintain certain important characteristics like quality, fair prices, and good customer handling skills, effective communication, efficient delivery and serious consideration of customer complaints.

During the interview, this was supported by a Hotel Manager who employs three graduates from VTCs in Southern Province, he said: ''Ahooo'' which means you have touched the point. He continued saying: ''Today Rwanda has became a Meeting Incentives Conferences and Events destination we need people who can talk to our customers! The graduates from VTCs on the practical side they are okey but when it comes to communicate in English and French Heheheee ! It is a big problem'' (interview schedule 1). This is supported by Adesina and Chinonso (2015) who consider that excellent communication skills enhance guest experience as it conveys that you are listening to your guests, valuing their feedback and conveying clear messages.

The results from table 18 imply that graduates are facing language barriers in English, French and Swahili to handle their customers in the workplace.
I maintain health and safety, and sustain the environment in the workplace (M=3.58, SD=.616), I apply computer skills in the workplace (M=2.78, SD=.647), I have skills, knowledge and attitudes required to apply hygiene and food safety in the workplace (M-3.30, SD=.692), I possess skills, knowledge and attitudes required to handle and store food accordingly (M=3.45, SD=.688), I have the skills and knowledge required to use kitchen equipment and tools, to prepare Mise-en-place of

the different ingredients, using the proper cutting and preparation techniques (M=3.51, SD=.665), I have the skills and knowledge required to use basic cooking methods and cook basic dishes (M= 3.48, SD=.688), I am able to create and manage a small business related to culinary art (M=3.19, SD=.693), I am capable of transferring competency based knowledge I acquired into actual practice on the ground (M=3.44, SD=.712), I compete well in the market based on the knowledge I acquired from competency based curriculum program (M=3.14, SD=.740), I feel I need more knowledge to better my professional skills (M=3.54, SD=.697), I am capable to teach others the skills I acquired from competence based curriculum (M=44, SD=.688), I am able to offer my skills/product anywhere in the world (M=3.07, SD=.590), I have learned public relations skills to collaborate with the industries (M=3.04, SD=.616).

Future Prospects

The aim of this sub question was to investigate the views of candidates about how Competency-Based Curriculum program have in store for them in the future. This research question was analyzed by Statistical Package for Social Sciences (SPSS) through Descriptive Statistics in order to determine general perception of graduates on Future Prospects, as seen in Table 19. The findings in the Table indicate that the general mean score of respondents in all aspects of Future Prospects was between 3.07 and 3.64, meaning agreement zone. This means that they have hope, to face tomorrow with the skills, attitudes and knowledge they have acquired in VTCs.

Table 19

Descriptive Statistics on Future Prospects

	N	Mean	Std. Deviation	Interpretation
There is room for further studies after successful completion of competency based curriculum	179	3.50	.782	Agree
The knowledge, skills and attitudes I acquired in competence based curriculum are durable and sustainable	179	3.64	.558	Agree
Employability is guaranteed through the completion of competence based curriculum program	179	3.07	.868	Tend to Agree
I am confident enough to face the world of work.	179	3.36	.676	Tend to Agree
I am confident to recommend a colleague to enrol in competency based TVET program,	179	3.54	.638	Agree
Competency based TVET program is useful to the individual and the society	179	3.58	.634	Agree
Competency based TVET program develops positive attitude of graduates towards work	179	3.54	.620	Agree
Competency based TVET affects creativity and logical thinking of graduates towards entrepreneurship	179	3.55	.629	Agree
Competency based TVET program curriculum helps the graduates to cope up with rapidly changing world	179	3.51	.639	Agree
Competency based TVET program can alleviate unemployment problem	179	3.49	.656	Tend to Agree
Competency based TVET program provides skills that graduates need in their life after school	179	3.54	.602	Agree
Future prospects	**179**	**3.482**	**.50497**	**Good**

There is room for further studies after successful completion of competency based curriculum (M=3.50, SD=.782), The knowledge, skills and attitudes I acquired in competence based curriculum are durable and sustainable (M=3.64, .558), these ratings were supported by the results from Focus group discussion where a graduate confirmed that: '' I graduated from Kigese VTC it was in 2013 I worked for two years in a Hotel in Kigali and as I was gaining Money I decided to upgrade my skills I continued my studies now I'm an undergraduate student at the University of Tourism Technology and Business Studies'' (GKS14, 24/4/2017).

Employability is guaranteed through the completion of competence based curriculum program   (M=3.07, SD=.868). This was supported by the Focus Group Discussion whereby two graduated confirmed that a graduate from Culinary Arts cannot lack a job. One said: ''I can confirm that my classmates we graduated together they have all jobs. In our country, Restaurants and hotels are growing very faster and they have to employ only those having at least a certificate in Hospitality this is according to Rwanda Development Board which has responsibilities to coordinate the tourism and hospitality Industry '' (GKS5, 24/4/2017).

One graduate (GRS5, 20/4/2017) said: ''we are SMART! , I cannot lack a job for your info during week a have a part time job a have a contract with a company dealing with catering in weddings in Kigali! My job is to prepare Mise en Place for them and serve invitees''.

Figure 8. Focus group discussion session.

I am confident enough to face the world of work (M=3.36, SD=.676), I am confident enough to face the world of work (M=3.54, SD=.638), Competency based TVET program is useful to the individual and the society (M=3.58, SD=.634),

Competency based TVET program develops positive attitude of graduates towards work (M=3.54, SD=.620), Competency based TVET affects creativity and logical thinking of graduates towards entrepreneurship (M=3.55, SD=.629), Competency based TVET program curriculum helps the graduates to cope up with rapidly changing world (M=3.51, .639), Competency based TVET program can alleviate unemployment problem (M=3.51, SD=.639), Competency based TVET program provides skills that graduates need in their life after school (M=3.54, .SD=602).

All of these items were rated good by the respondents. This implies that entrepreneurship education was well practiced during the training. Entrepreneurship and competency based training are inseparable. Entrepreneurship has the power to strengthen and change the attitude of trainees towards problems and risks and how they overcome them. The main purpose of competency based TVET training is to prepare trainees for employment and entrepreneurship facilitates employment opportunity for the trainees. On other side there is a political will to empower TVET in Rwanda.

This view is supported by Brown, Hesketh and Williams (2003), who stated that entrepreneurship is an important means and valuable strategy to create jobs and to improve the livelihood and economic independence of young people. Mostly, the effectiveness of competency based training is supported by entrepreneurship training. Entrepreneurship education enables trainees to be skilled, confident, creative and disciplined. The application of entrepreneurial competencies in their daily life empowers trainees to learn business and enhance their social and life skills. In a nutshell, it is a solution to employment problems.

Work Ethics

Table 20 indicates that the overall mean of scores of respondents is in agreement zone (M=3.52, SD=.54406).

Table 20

Descriptive Statistics Work Ethics

	N	Mean	Std. Deviation	Interpretation
I have been trained to demonstrate behavior and attitudes that are appropriate for the workplace	179	3.51	.612	Agree
I understand that workplaces have policies and procedures that need to be followed	179	3.51	.612	Agree
I am familiar with the rights and responsibilities of workers and employers have explored ways to exercise rights in the workplace.	179	3.53	.621	Agree
I have been trained to handle customers with respect and care	179	3.53	.602	Agree
I received training on being honest, reliable and responsible at work	179	3.57	.590	Agree
I display integrity- does not tell lies, accept bribes, cheat, and violate rules or tolerate corruption	179	3.47	.706	Tend to Agree
Work ethics	**179**	**3.5223**	**.54406**	**Very Good**

Work ethics was rated Very Good by graduates from VTCs offering Tourism and Hospitality courses. It means that they received training on Work Ethics when they were at school.

Table 20 tabulates the findings : I have been trained to demonstrate behavior and attitudes that are appropriate for the workplace (M=3.51, SD=.612), I understand that workplaces have policies and procedures that need to be followed (M=3.51, SD=.612), I am familiar with the rights and responsibilities of workers and employers have explored ways to exercise rights in the workplace (M=3.53, SD=.621), I have

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been trained to handle customers with respect and care (M=3.53, SD=.621), I received training on being honest, reliable and responsible at work (M=3.53, SD=.590), I display integrity- does not tell lies, accept bribes, cheat, and violate rules or tolerate corruption (M=3.47, SD=.706).

These findings are supported by the work of Jaszay (2002) who confirms that the work ethic is a value based on hard work and diligence. The individual is polite and helpful to customers, even those who are unpleasant. In the context of competency based trainings at the end of their trainings they develop an attitude of Being honest, having a positive attitude, taking initiative, caring about co workers, doing more than expected, being reliable and responsible, learning new skills and being a team player, takes on additional responsibilities on the job.

The qualitative findings from Focus Group Discussion supported the above mentioned results. A graduate confirmed that : '' My teacher of Food Production used to tell us how ethically we should behave towards customers and our employers, that has helped me to be who I'm now'' (GH6,13/4/2017).

One Hotel Manager during the (interview Schedule 3) agrees that: ''the program of TVET on tourism and hospitality has played a role in this Industry. For instance I have 6 students who finished in this program in Culinary Art and food and beverage services. They have knowledge and attitude for the job. We used to have those not skilled, for your info I cannot now employ someone who does not have a certificate in the area of hotel''.

In tourism and hospitality industry employees understand how every service has to be delivered to customers using international standards, and this should be done ethically (Labarre, 2013).

Graduate from TVET Schools are not only trained to demonstrate behavior and attitudes that are appropriate for the workplace but also should understand that workplaces have policies and procedures that need to be followed. Knowledge of the professional code of ethics represents the social dimension of the basic level of ethical competence (Kallioinen, 2007).

A the end of VTC training students are able to demonstrate right ethics in terms of Being honest, having a positive attitude, taking initiative, caring about co workers, doing more than expected, being reliable and responsible, learning new skills and being a team player are also examples.

Time Management

Table 21

Descriptive Statistics on Time Management

	N	Mean	Std. Deviation	Interpretation
I have been trained to demonstrate promptness in service delivery	179	3.62	.581	Agree
I know the importance of task planning and managing time	179	3.61	.583	Agree
I know how to answer quickly questions from customers	179	3.63	.580	Agree
I have been trained to provide services as promised on time	179	3.65	.575	Agree
Time management	**179**	**3.6271**	**.53617**	Very Good

Table 21 indicates that graduates from VTCs offering Tourism and Hospitality courses in Southern Province, Rwanda have received training on how to manage time while at workplace (M=3.6271, SD=.53617). The rating of Time Management is Very Good. This shows that graduates from VTCs offering Tourism and Hospitality courses especially in Culinary Arts have trained to demonstrate promptness and answer quickly customers in service delivery. I have been trained to demonstrate promptness in service delivery (M= 3.62, SD=.581), I know the importance of task

planning and managing time (M=3.61, SD=.583), I know how to answer quickly questions from customers (M=3.63, SD=.580), I have been trained to provide services as promised on time (M=3.65, SD=.575).

These quantitative findings were supported by Biraori, Okibo, and Wamalwa (2014) who consider that one of the major determinants of service quality is timely and adequate response. Employees should be willing and able to deliver timely and substantive response to inquiries and complaints of customers. Service recovery and problem solving have long been recognized as important parts of services quality.

In summary findings for research question two revealed that graduates from VTCs offering Tourism and Hospitality courses were prepared for the workforce before they graduates. This was supported by quantitative results from questionnaires that graduates filled where their competence was rated as Good, Future Prospect as Good, Work ethics as very Good as well as Time Management Very Good. On the other hand qualitative findings from Focus group discussion with graduates from VTCs offering Tourism and Hospitality and Interview Schedules from Hotel Managers supported their workforce preparedness. The findings imply that the future of graduates is guaranteed and competency based curriculum helps students to cope up with rapidly changing world.

Relationship between Competency-based Curriculum Implementation and Workforce Preparedness

Research question 3. *Is there a significant relationship between the competency-based curriculum implementation and the graduates' workforce preparedness?*

This is a key research question in this paper trying to establish the influence of the implementation competency-Based Curriculum on workforce preparedness.

This research question called for testing of the following null hypothesis by the use of Pearson-product moment Correlation Coefficient: H$_O$ *There is no significant relationship between the Competency-Based Curriculum implementation and the graduates' workforce preparedness.*

The Nature of existing relationships among variables was either positive or negative and was interpreted based on the following formula: r $\geq$ .80 = Strong relationship; .80 < r $\leq$ .30 = Moderate relationship and r < .30 = Weak relationship.

Table 22

Correlation Coefficients

		Identification of competencies	Teaching-learning process	Learning resources	Assessment
Competence	Pearson Correlation	.684**	.728**	.545**	.600**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	179	179	179	179
Future prospects	Pearson Correlation	.612**	.687**	.482**	.623**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	179	179	179	179
Work ethics	Pearson Correlation	.580**	.671**	.454**	.622**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	179	179	179	179
Time management	Pearson Correlation	.651**	.735**	.420**	.733**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	179	179	179	179

**. Correlation is significant at the 0.01 level (2-tailed).

As table 22 indicates, there is significant relationship at 0.05 levels (2-tailed) among variables in question: First there is significant positive moderate relationship (r =.684, p=0.00) between competence and identification of competencies. Because the correlation is positive, it is therefore inferred that students who are aware on how

and why competencies are identified in occupational needs of the industries they become competent because they know what kind of competencies are required for the workforce.

In the focus group discussions made, some participants agreed on the problems of identifications of competencies during training, one participant said: ''this meeting is really interesting and thank you for the drink you have given us, I graduated in 2014 in IPRC South in Culinary Art our teacher who taught us the module of Health, safety and environment in the workplace used to tell us that what will be required to us in work place is Maintain personal hygiene, address unsafe situations on the job, respond appropriately to emergencies at work and sustain environment. He kept saying it our classes. For sure I liked the course and I passed it well I'm happy because I'm applying what we learnt in that module'' (GHS3, 13/4/2017). Another one said: ''it is my first time to hear this, competencies! No one did not mention this in class but I was among the best student this discussion is interesting''. (GKS1, 24/4/2017). Competencies to be achieved by the trainees need to be publicized in advance for effective implementation of competency-based curriculum.

This idea is consistent with (Dadi, 2014) who has indicated that, in competency-based instruction, trainees are informed about the criteria and attitudes that are important to the occupation. Furthermore, competencies to be achieved need to be specific, precise and stated in written form. Again, this idea corresponds with the work of Hailu (2012), which indicates that, one of the characteristics of competency based instruction is that whatever students learn is based on specific, precisely stated outcomes that have been recently identified as being essential for successful employment in occupation for which the trainee is being trained.

Competencies in VTCs offering tourism and hospitality courses should be made available to all concerned exactly with what the students will be able to do upon completion of their training.

Table 22 indicates that there is positive moderate relationship (r =.728) between teaching and learning process and competence. This implies that the more teaching and learning activities are interactive and engaging at the same time integrate skills, attitudes and knowledge more students will become skilled and compete well in the market based on the knowledge they acquired from competency based program. This is in harmony with Focus group discussion where a graduate said : '' I'm performing well here because teachers who taught us were from University of Tourism Technology and Business Studies they have knowledge and skills they are good'' (GRS14, 20/4/2017).

The following graduate working in Hotel in Southern Province added: '' I know preparing Cake for wedding because the teacher who taught us was an expert in that , it was not easy for me to continue my studies because I have 3 children and I have to take care of them'' (GHS 3, 13/4/2017).

Figure 9. Graduates filling the questionnaires.

The table continues showing that there is a positive and moderate relationship (r =.545) between learning resources and competence, this means that the more learning resources like cooking machines , equipment for kitchen, practical material for instruction and material for mise en place are available and appropriate during teaching-learning process in competency based curriculum implementation students will become competent.

This was supported by a graduate from VTCs offering culinary arts saying that: ''you cannot compete with one who studied at VTC which has all learning material. My dream was to go to IPRC South unfortunately I was not selected because many students applied'' (GH8, 13/4/2017). During my observation schedule 1 in class where a teacher was teaching students how to prepare pottage , I realised that when a VTC has sufficient learning resources and practical material for appropriate task it stimulates not only attention and curiosity but also engagement. It plays a role and motivates students to become competent. Therefore, learning resources must be appropriate and available.

Figure 10. During observation schedule 1

Table 22 shows that there is positive moderate relationship (r =.600) between competence and assessment. This implies that the more the students are assessed accordingly the more they will increase their competence.

The researcher argues that, moving forward, CBE programs should focus on providing evidence that supports the validity of their assessments and their interpretation of assessment results. Specifically, teachers should work to clarify the links between the tasks students complete on an assessment and the competencies those tasks are designed to measure. This is supported by Mcclarty and Gaertner (2015) who argue that when developing competency assessments, there are two important stages. The first is assessment development and score validation in other words, do scores on the assessment reflect the different levels of knowledge and skills that assessment designers are trying to measure?. The second is determining how well a student must perform on the assessment in order to demonstrate competency in other words, what is the cut score that separates the competent from the not-yet competent?

Assessment should engage students in applying knowledge in the same way as they are used in the real world outside and inside of school. In CBT the assessment is continuous and based on actual demonstration of competency.

In the above mentioned table 22, there is a positive moderate relationship between future prospects and identification of competencies (r=.612), this implies that the more competencies to be achieved by students are specific, precise, updated continuously to meet the need of the industries, repeatedly and clearly explained to students the more the students will be more confident to face the world of work and have creativity and logical thinking towards entrepreneurship. This was in harmony with the statement of graduate during the focus group discussion, ''I was motivated to

work hard in Culinary Arts because I knew that we are needed in the market''
(GH10, 13/4/2017).

Positive and moderate relationship between future prospects and teaching and learning process (r =.687) is tabulated in table 22 this implies that the more the teaching -learning process are engaging, learning activity pushed until competency is achieved, students integrate skills, attitudes knowledge, instruction for each task package is detected and corrected the more student will enjoy their future because knowledge they have acquired in VTCs.

Positive and moderate relationship between future prospects and assessment (r =.623) this implies that the more the assessment is continuous, based on demonstration of competencies, engages students in applying knowledge in the same way as they are used in the real world outside of school, integrates knowledge, skills and attitude the more the attitude of graduates towards work will be developed.

Positive and moderate relationship between future prospects and learning resources (r = .482) this implies the more the learning resources in terms of cooking machines, equipment for kitchen, practical material for instruction, material for mise en place are available the more the students will be confident enough to face the world of work'' this was supported during the focus group discussion where a graduate said: '' I want to go back to school to upgrade my skills because where I graduated from did not have enough material for practical, I spent there one year and half ! I'm criticized sometimes by my colleagues'' (GRS10, 20/4/2017).

Table 22 shows again the positive and moderate relationship (r =.735) between the time management and teaching and learning process. This implies that the mores students are well taught the more they become good managers of time.

It shows again that between time management in terms of demonstrating promptness in service delivery, answering quickly questions from customers, providing service as promised and identification of competencies have positive and moderate relationship (r= .651). It means that the more the competencies are well identified and made known to students the more they will be able to manage their time accordingly. This study revealed in table 22 that there is a positive and direct relationship between learning resources and time management (r=.420) and assessment via time management (.733) which implies that the more students are in integration with appropriate learning materials , kitchen equipments, material for mise en place and when competencies acquired are assessed objectively the more when the will be at work place they will be able to manage their time accordingly. This was supported by a hotel Manager during the interview schedule: ''I know those VTCs that have trained their students to provide services as promised on time. Those students know how to plan and manage time accordingly, they have qualified teachers'' (Interview Schedule 3).

Figure 11. Interview schedule with hotel manager we have been served by one of graduate from VTCs.

What the manager during the interview schedule 4 said about promptness was true because when I reached his hotel it was around 12:30 pm I ordered food and really I was served on time.

Finally table 22 continues showing that there is positive and moderate relationship between the following variables and work ethics. Identification of competencies and work ethics (r = (.580), teaching- learning process and work ethics ((r = .671), learning resources and work ethics (r = .622), assessment and work ethics (r = .6.22). These results means that the more competencies are well identified from the occupational needs and made known to students and the more there is quality teaching and learning, sufficient and available learning resources, assessment well done graduates in VTCs the more their ethics behaviour at work will be appreciated not only by their employer but also customers.

Practitioners in the hospitality sector rate work ethics as one of the most important issues faced by the industry. Many scholars argue that the hospitality sector is open to frequent unethical practices. Managers and employees, due to intensive

face-to-face interactions with clients, confront many ethical dilemmas in their day-to-day operations. Previous research confirms that a positive ethical climate nurtures a healthy organization by increasing manager and employee job satisfaction, enhancing customer experience, and increasing the organization's profit (Knani, 2014).

In conclusion, after a long discussion from focus group discussions with graduates from VTCs offering Tourism and Hospitality courses, interview schedules with Hotel managers and findings from questionnaires and when we look at Table 22 of Correlation Coefficients the P value in the table 22 is less than 0.05 which means that there is a significant relationship between the competency-based curriculum implementation and the graduates' workforce preparedness, therefore the null Hypothesis was rejected.

Predictors of Workforce Preparedness

Research question 4. *What indicators of competency-based curriculum implementation best determine workforce preparedness?*

The multiple regression was used to identify best variables determine workforce preparedness. The model summary table 23 shows that the multiple correlation coefficient (R), is .793 for teaching and learning process, .816 for Teaching- learning process and identification of competencies and .824 for Teaching-learning process, Identification of competencies and assessment. This reveals that when the three variables are correlated with workforce preparedness, the relationship is strong. The Adjusted R^2 is .627 for teaching and learning process, .662 for Teaching- learning process and identification of competencies and .674 for Teaching-learning process, Identification of competencies and assessment. This implies that 62.7% of the variance in workforce preparedness is accounted for by the teaching and learning process, 3.5% by identification of competencies, and 1.2% by assessment.

Table 23

Model Summary of Indicators of Workforce Preparedness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.793[a]	.629	.627	.26360
2	.816[b]	.665	.662	.25116
3	.824[c]	.680	.674	.24650

a. Predictors: (Constant), Teaching-learning process

b. Predictors: (Constant), Teaching-learning process, Identification of competencies

c. Predictors: (Constant), Teaching-learning process, Identification of competencies, Assessment

The ANOVA table 24 shows that F=300.516, F=174.983, F=123.688 and it is statistically significant. This indicates that the combination of the predictors significantly combine together to predict workforce preparedness.

Table 24

ANOVA Results on Indicators of Workforce Preparedness

	Model	Sum of Squares	Df	Mean Square	F	Sig.
	Regression	20.881	1	20.881	300.516	.000[b]
1	Residual	12.299	177	.069		
	Total	33.180	178			
	Regression	22.077	2	11.038	174.983	.000[c]
2	Residual	11.103	176	.063		
	Total	33.180	178			
	Regression	22.546	3	7.515	123.688	.000[d]
3	Residual	10.633	175	.061		
	Total	33.180	178			

a. Dependent Variable: Workforce preparedness

b. Predictors: (Constant), Teaching-learning process

c. Predictors: (Constant), Teaching-learning process, Identification of competencies

d. Predictors: (Constant), Teaching-learning process, Identification of competencies, Assessment

Table 25 shows the regression coefficients needed for the multiple regression equation to predict workforce preparedness.

Table 25

Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.275	.122		10.488	.000
	Teaching-learning process	.635	.037	.793	17.335	.000
2	(Constant)	1.224	.116		10.518	.000
	Teaching-learning process	.466	.052	.582	8.912	.000
	Identification of competencies	.208	.048	.284	4.354	.000
3	(Constant)	1.229	.114		10.754	.000
	Teaching-learning process	.395	.057	.494	6.909	.000
	Identification of competencies	.158	.050	.216	3.142	.002
	Assessment	.132	.048	.189	2.779	.006

a. Dependent Variable: Workforce preparedness

The multiple regression equation in predicting workforce preparedness is as follows:

$$Y' = .395X_1 + .158X_2 + .132X_3 + 1.229$$

Table 25 shows that teaching-learning process, identification of competencies and assessment are predictors of work force preparedness.

Findings from observations in different classes, focus group discussions schedules with graduates from VTCs offering tourism and hospitality courses and interview schedules revealed the same. A graduate during focus group discussion revealed that: ''I'm supervisor of the kitchen where I work this is not by chance. Skills, attitudes and knowledge I acquired from my school helped me to compete with others and I have been appointed as their supervisor'' (GRS7, 20/4/2017). This is supported by Thomas , Hdl Silke and Martin (2005) who argue that Competence based education programs build from the idea that it is more important to focus on outcomes what a student knows and can do than on inputs.

During the observation schedule 1 at the end of the lesson, the researcher interviewed one student. I wanted him to let me know how he was prepared for the

workforce. He said: ''as you see behind me class is over but we still want to exercises we want to master the lesson on how to cook pottage. The teaching and learning and assessment in this IPRC is ok for me. I'm prepared next week we shall go for the industrial attachment and I want to be attached at Serena Hotel, I'm sure that I will get the job there thanks'. (Video 1, IPRC South).

Figure 12. Observation schedule in class (video).

Another graduate during the focus group discussion revealed that the way he was assessed had a positive impact on what he is now saying that: ''where I graduated from before doing the final exam from WDA our teachers have a culture to bring all exams done previously and were done as assignments and final exam, this has helped me to know what is needed in the tourism and hospitality industry '' (GNS1, 6/4/2017).

High quality TVET curriculum rests on some important features. The first is represented by an assumption that future workers must possess a number of basic competencies and skills before entering the workforce.

Figure 13. At the end of one group discussion.

At the end of group discussion one graduate said : '' the skills, knowledge and attitudes we acquired from VTCs helped us to have an association of doing catering during weekends every member contributes each month 5000 Frw non in our account we have around 245000 Rfw. I think in the future our association will have its own restaurant in Park station in Kigali'' (GKS14, 24/4/2017).

Competency Based Training is an industry and demand driven (outcomes-based) education and training programme based on well defined industry generated standards (occupational standards). These industry standards are the basis upon which the program (Curriculum), assessment and teaching-learning are designed and developed (Rahman, 2010).

Model of Competency-based Curriculum Implementation for Relevance

Research Question 5. *How can the TVET program on tourism and hospitality be relevant to the workforce needs of the industry?*

This question sought views to address the issue of workforce preparedness of graduates from TVET schools. The question was guided by a proposition that a well prepared workforce from TVET schools cannot be found without a quality implementation of Competency- Based Curriculum. This question was answered by

the use of data from the interview schedules, focus group discussions, documents and findings from preceding research questions. According to (Cochran & Ferrari, 2009), education has a vital role for character building and every education system needs to integrate in its curriculum elements aiming at having a well prepared workforce for the industry.

Responding to this, the main purpose of this research question was to develop a model that will guide in having relevant workforce for the needs of the industry from TVET program on tourism and hospitality. In this study workforce preparedness means being prepared for the workforce it refers to the level of aptitude for beginning employment. . Respondents of this study mentioned some weaknesses of graduates from VTCs offering Tourism and Hospitality courses in culinary Art and suggested the way forwards in Competency-Based Curriculum implementation for the future graduates. For instance on Hotel Manager said: ''These TVET schools needs to involve us in identification of competency to be achieved by graduates because when those graduates finish their studies they come to us for the employment. They need also to by equipments for the kitchen and learning materials this will help graduates to be familiar with what is happing in the real industry'' (Interview Schedule 2). Another one added: ''these schools are still lagging behind on the side of equipments. It is true, some of our employees who graduated from those VTCs sometimes they don't know how to manipulates cooking machines and some materials in the kitchen, I have ordered to give them some trainings before they start working. Some headmasters are requesting partnership with my hotel to do practical in my Hotel'' (Interview Schedule 2).

Another weakness TVETs have to face is on the side of communication skills. The hospitality industry needs workers who can attract customers and handle quickly their concern in service delivery.

Competencies are identified in occupational standards; comprehensively describe the competence a person has to achieve in order to be considered qualified in a certain field. It specifies the standards of performance that the trainees are expected to achieve in their work, and knowledge and skills they need to perform effectively.

One of the characteristics of competency based instruction is that whatever students learn is based on specific, precisely stated outcomes that have been recently identified as being essential for successful employment in occupation for which the trainee is being trained.

This suggests that the Tourism and Hospitality industry especially Hotel Managers need to be involved in identification of competencies to be achieved by students at the same time students must know the kind of skills, knowledge and attitudes he will acquire during the training. This will have a positive impact on the workforce preparedness.

On the side of teaching-learning process from what I observed in different class and from Focus group discussion, there is a need for teachers to teach in English as the curriculum stipulates. Teachers in VTCs have to revise the way of teaching languages especially English, French and Swahili.

There is a need to avail and organise cooking machines, equipment for kitchen for students in VTCs offering culinary arts. Their hands on skills will not be demonstrated without practical material. In views of this (Thompson et al., 2013) considers Learning materials to be well appropriate for the tasks and available for every

task to be relevant to the occupation in the world of work and materials and to be effectively utilized during instruction.

Even if learning resources in not among best predictors of workforce preparedness it leads to competence as a specific aspect of workforce preparedness as it is tabulated in table 22 where learning resources have a positive and moderate relationship with competence (r = .545). The same table revealed that Learning resources has a positive moderate relationship with future prospects (r = .482) , work ethics (r = .454) and time management (r = .420).

Assessment in competency based curriculum must assess competencies to be achieved, this has been mentioned by graduates during the focus group discussion, for instance one graduate said: ''where I graduated from, we have spent almost one trimester and the assessment was only theory. Our school had financial problems'' (GNS2, 6/4/2017). After a long discussion a second graduate emphasized that: ''2/4 of our teachers told us that each assessment prepared us to the workforce'' he continued talking to me directly saying ''I'm sending you according to my experience I went through now go and tell those teachers to assess our little brothers according to what is needed in the workforce'' (GHS1, 13/4/2017).

In view of this, Mcclarty and Gaertner (2015) considers CBT assessment as the process of collecting evidence of a learner's performance, upon which an assessor judges whether or not, or the extent to which a learner has met the performance requirements of the learning outcome laid in a particular unit and then making a decision, based on these judgements as to whether a learner has achieved the learning outcome as a whole or not.

In conclusion, a question of concern that follows this long discussion is how can graduates from VTCs offering tourism and hospitality courses be prepared for the

workforce ? In response to this question, this study developed a model figure 20, which will guide up proper process to workforce preparedness. Bust this can be done effectively based on the availability of schools curriculum developers and the industry, learning resources and professional development of the teachers.
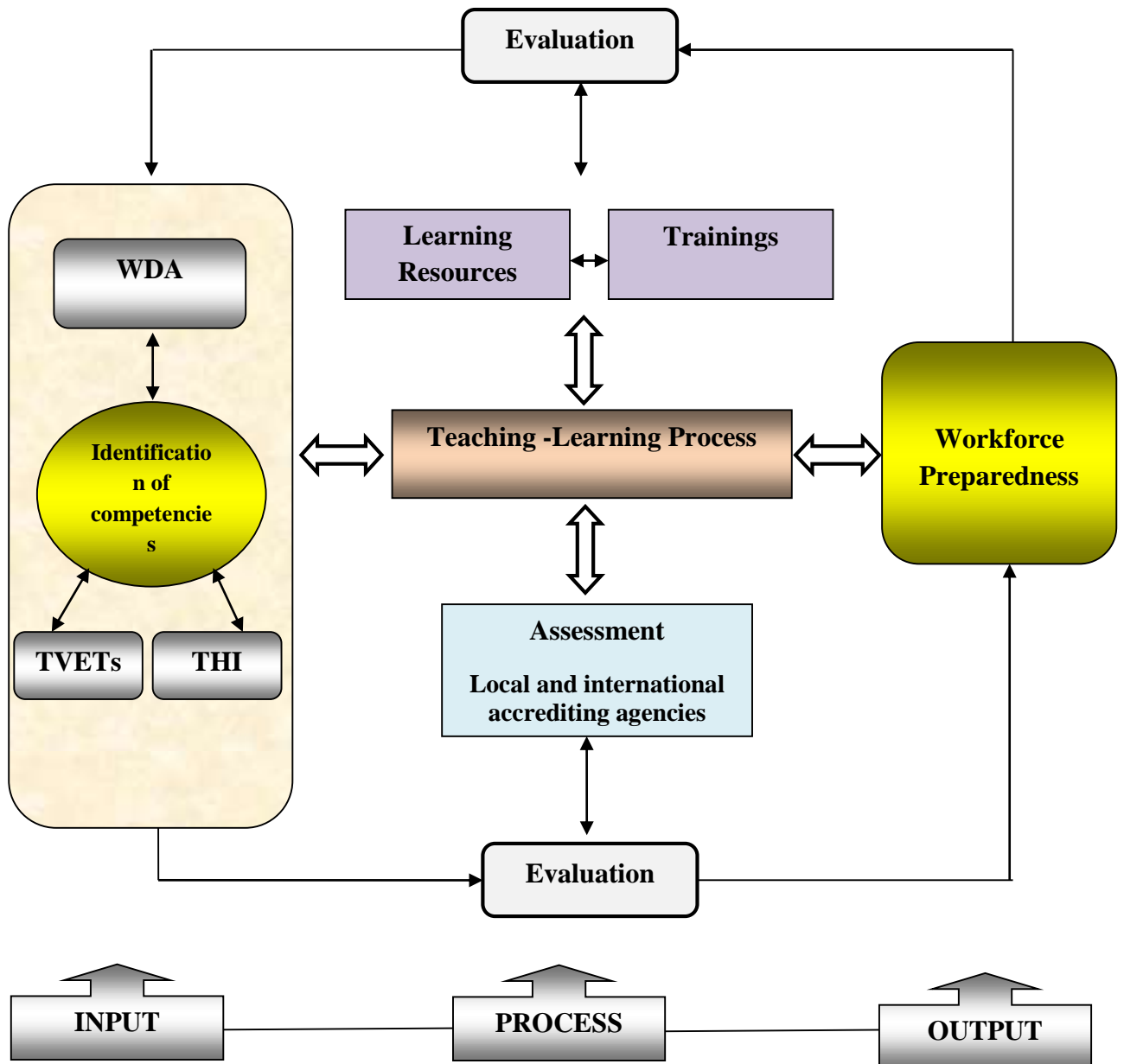
Figure 20. MBAROVE's model of TVETs curriculum.

MBAROVE's model is named after the initials for its proponents: **Mba**rushimana Nelson, Prof. Elizabeth **Ro**le M. Role, PhD and Dr. **Ve**ncie Allida, PhD .

Significance of MBAROVE's model

This model contends that students from VTCs offering tourism and hospitality courses in Culinary Arts can be well prepared for the workforce with success once the identification of competencies through WDA, TVETs, Tourism and Hospitality Industry are well identified. This means Government through WDA will contribute with regards to national level. Agents from Tourism and Hospitality Industry like Hotel Managers, tour companies and other bodies related to tourism will bring their inputs. Together they will identify right competencies to be achieved at the end of the program. TVETs schools represented by teachers and entire school administration will contribute too much; teachers are the ones who implement the curriculum they will advise on how these competencies identified will be implemented.

Teaching-learning process is a crucial part where the teacher will use different methods, instructional strategies, learning resources and assessment (formative and summative) towards workforce preparedness. Teachers will need to be trained on the new equipments and learning resources for them to be everyday updated.

An evaluation will be done after a certain period to find out if the Inputs, Process and Output are done in standard of Competency-Based curriculum implementation. Local and international accrediting Agencies will be involved fro constructive feedback.

This MBAROVE's model was developed to guide proper implementation of competency-based curriculum in VTCs in Rwanda. The model will be disseminated to curriculum developers and policy makers in Rwanda especially Workforce Development Authority with recommendations of this study to enable them make

necessary policies on implementing the Competency-Based curriculum in VTCs offering tourism and hospitality course in Culinary Arts.

More experimental studies will be conducted to confirm the impact of Competency Based curriculum in tourism and hospitality on workforce preparedness. The model will be further published in referred journals in order to contribute knowledge in the global. This model has three major parts namely input, process and output.

- **Input**: This has to do with the identification of competencies from different institutions which are government, TVTs represented by teachers and Head Teachers and at the end all concerned people involved in Tourism and Hospitality Industry.

- **Process**: This revolves around the teaching learning transactions. Teachers and students are fully involved. Summative and formative assessment will be done to find exactly whether competencies are being mastered by students. Teachers will be given trainings on how they can use, manipulate new equipments and different learning resources.

- **Output:** This has to do with workforce preparedness. Students at the end of their program will be well prepared and ready for the workforce.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND

RECOMMENDATIONS

This chapter gives an overview of the study starting from the statement of the problem to the analysis of the investigation. It also presents a summary of findings and gives conclusions and recommendations which provide answers to the problem raised in this study.

Summary of the Study

The Tourism and Hospitality Industry has been identified as a priority sector for Rwanda as it is expected to play a leading role in driving the economy forward. This sector has rapidly grown into a major foreign exchange earner for Rwanda, surpassing agriculture in the last two years. The Tourism and Hospitality Industry sector in its unique nature of a service sector has seen increased international investment in the recent past. International hotel brands have made a stake in the Rwandan market. However, many hotels and restaurant managers face problems trying to satisfy their customers and end up experiencing high levels of customer dissatisfaction because of food and drinks served with low quality and sometimes waiters don't tell exactly when service will be provided. This scenario raises a concern. This gap between the growth of the industry and qualified workforce, calls for government intervention toward matching the industry growth by introducing competency-based curricula in TVET program on tourism and hospitality. This study evaluated whether the competency-based curriculum in TVET program implemented in Vocational Training centres prepares graduates for the Tourism and hospitality industry workforce.

Concurrent mixed methods research approach was employed in this study to investigate on Perceived impact of competency-based curriculum in tourism and hospitality on workforce preparedness in Southern Province, Rwanda. The target population of this study was 12 VTCs offering tourism and hospitality courses in Southern Province, Rwanda from which a sample of 6 public VTCs was determined through Purposive sampling techniques In each District one public VTC offering tourism and hospitality was picked. A sample of 179 graduates from VTCs offering Tourism and Hospitality courses and 3 hotel Managers participated in this study through questionnaires, interview schedules, observation schedules, document analysis and focus group discussions. Research instrument were validated by expert judgment. A pilot study was conducted in one school which are not part of sampled VTCs and through Statistical Package for Social Sciences (SPSS), acceptable reliability of questionnaire items was established before the data collection. Open-ended data was analyzed and arranged using thematic approach. Descriptive statistics determined mean scores in various research questions. The null hypothesis was analyzed through Pearson-product moment correlation coefficient, multiple regression was used to find out the indicators of competency-based curriculum implementation best determine trainees' workforce preparedness. Review of related literature and studies were used to enhance discussions and findings of the investigation. Each research question was tested and discussed separately, with its findings followed by a statement on action taken and the implication thereof.

Summary of Findings

After data presentation, analysis and interpretations, the researcher was able to come up with the following findings with regards to Perceived impact of competency-

based curriculum in tourism and hospitality on workforce preparedness in Southern Province, Rwanda:

1. Regarding to what extent is the competency-based curriculum in TVET program on tourism and hospitality implemented in the vocational training centres in identification of competencies respondents tended to agreed with all six statements of Identification of Competencies which means that they at least leaned in the direction of agreeing that competencies to be achieved were derived from occupational needs of the industries. Regarding teaching-learning process graduates under investigation had positive attitude toward teaching and learning process in VTCs where they graduated from. Thus, the way an individual thinks, perceives, feels, values and acts toward will definitely influence his or her achievement in the future. Teaching and learning were found to be in Kinyarwanda for the most of the time in class which has negative impact on the preparedness of graduates in the future.

   For learning resources the findings revealed that VTCs are still having challenges to have enough equipments and skilled teachers to use them appropriately. It was found that in assessment some lectures still have a problem in assessing their students in competency based curriculum approach; the assessment of competencies is not done accordingly.

2. Regarding the perception of the trainees of their workforce preparedness in terms of competence the results indicated their competence at work as good. However they are still having languages barriers in English, French and Swahili during their communication.

For their Future prospects the results revealed that they have hope to face tomorrow with the skills, attitudes and knowledge they have acquired in VTCs. It was found that entrepreneurship education was well practiced during their training. Graduates form VTCs offering Tourism and Hospitality courses confirmed to have receiving sufficient training related to Work ethics and Time management was, it was rated very good.

3. There is a significant relationship between the competency-based curriculum implementation and the graduates' workforce preparedness, therefore the null hypothesis was rejected.

4. Teaching and learning process, identification of competencies, and assessment account for 67.4% of the variance in workforce preparedness.

5. MBAROVE's model was developed to guide proper implementation of competency-based curriculum in VTCs offering tourism and hospitality courses in Culinary Arts in Rwanda. It can be well achieved with success once the identification of competencies; teaching-learning process, learning resources and assessment are done in standard of Competency-Based curriculum implementation.

Conclusions

The following conclusions were reached at with regards to Perceived impact of competency-based curriculum in tourism and hospitality on workforce preparedness in Southern Province, Rwanda:

1. Graduates from VTCs have a common perception that Teaching and learning is done in Kinyarwanda and advises to be done in English as it is stipulated in curriculum and a focus to be given to French and Swahili, languages used in the hospitality industry. Hotel managers and some graduates mentioned that

some VTCs lack Equipments and learning resources are not appropriate for the workplace, graduates and hotel managers revealed that the identification of competencies needed in the workplace are not well identified and some students don't know them. The research indicated that assessment should focus on competencies to be achieved.

2. Graduates were happy on how they were prepared they are ready to face tomorrow. Regarding graduates' perceptions towards competency based TVET curriculum, even though the grand mean revealed positive perceptions, other important variables that influence the effectiveness of competency based program were unfavourably perceived by both graduates and Hotel Managers.

3. There is positive and direct relationship between competency-based curriculum and workforce preparedness. This implies that the more the competency based curriculum in terms of identification of competencies, teaching-learning process, learning resources and assessment are well done accordingly, the more the graduates will be well prepared for the workforce in terms of competence, future prospects, work ethics and time management.

4. Teaching and learning process, identification of competencies and assessment are best predictors of workforce preparedness.

5. The MBAROVE's model will guide the preparation of a competency-based curriculum implementation towards workforce preparedness of graduates from VTCs in terms of being competent, confident to face the world of work, being honest, reliable, responsible at work and good time managers.

Recommendations

Based on findings of this study, the researcher recommends that:

1. Through Workforce Development Authority, the problem of workforce preparedness in TVETs be resolved by the use of model developed in this study, MBAROVE'S model.

2. School managers do monitoring and evaluation and make sure that Teaching and learning in TVET is done in English and provide trainings to teachers teaching languages needed in tourism and hospitality industry.

3. The school managers look for equipment and learning resources to better prepare graduates for workforce

4. The Ministry of Education, through the Workforce Development Authority plays a role in involving managers from hospitality industries in competencies identification to be achieved by students ensuring that the assessment integrates knowledge, skills and attitudes.

5. The Ministry of Education, through the Workforce Development Authority provide trainings to national curriculum developer that enhances global competitiveness in Competency-Based Curriculum.

6. The Ministry of Education involve international evaluators and accrediting agencies in curriculum evaluation at national level.

7. Parents and teachers promote enrolment in TVET.

Recommendations for Further Studies

The researcher recommends the following studies to be conducted:

1. Use of MBAROVE's model and Constructivism Theory: Competency Based Instructional Strategy.

2. Needs assessment towards improving the Competency-Based Curriculum implementation in Rwandan TVETs: MBAROVE's model

3. Competency-based curriculum and its impact on job creation in Rwanda

4. Competency- Based Curriculum in TVET: Implementation and perceived impact on workforce preparedness in Rwanda.

REFERENCES

Acakpovi, A., & Nutassey, K. (2015). Adoption of competency based education in TVET Institutions in Ghana : A case study of Mechanical Engineering Department , Accra Polytechnic. *International Journal of Vocational and Technical Education*, *7*(7), 64–69. doi: 10.5897/IJVTE2014.0150

Addy, M.E., (2008). Educational Reforms and the Sciences, Legon Observer, (1),14-18.

Adesina, K. I., & Chinonso, I. (2015). Service delivery and customer satisfaction in hospitality industry : A study of the Divine Fountain Hotels Limited , Lagos , Nigeria. *Journal of Hospitality and Management Tourism*, *6*(1), 1–7.

Africa, S. (2014). *Passport to Africa*, (June), 2014–2018. PT Lagos.

Arfo, E. B. (2015). *A Comparative Analysis of Technical and Vocational Education and Training Policy in Selected African Countries* (Unpublished Doctoral dissertation). University of KwaZulu-Natal, Durban.

Allais, S. (2010). The implementation and impact of National Qualification Framework: report of a study in 16 countries. Geneva: International Labour Office.

Alkin, M. C. (2004). *Evaluation roots: Tracking theorists' views and influences*. Oaks, CA: Sage.

Anane, C. A. (2013). Competency based training: Quality delivery for technical and vocational education and training (TVET) institutions. *Educational Research International*, *2*(2), 117–127.

Authority, D., Ministry, W. D. A., & Empowering, E. (2013). *Ministry of Education Hotca3001- TVET Certificate in Culinary Arts Level 3 curriculum*. AC: Impremerie press.

Ayoun, B.M., & Moreo, P.J. (2008). The influence of the cultural dimension of

uncertainty avoidance on business strategy development: A cross-national

study of hotel managers. *International Journal of Hospitality Management*,

27(1), *65-75,* doi: 10.1016.2007.07.008.

Baldauf, B., Hogarth, T., & Hoyos, M. De. (2008). *Going global ?* , NR:Press.

Biraori, O. E., Okibo, B. W., & Wamalwa, W. R. (2014). Internal Customer

Satisfaction Assessment in the Public Sector : A Case Study of Fleet

Management Services Delivery, *International Journal of Recent Research in*

Commerce Economics and Management 1(2), 12–28.Retrieved from

www.paperpublications.org.

Blanch, G. (1994.) Making the hospitality curriculum more accessible to non-native

English speakers. *Hospitality & Tourism Educator,* 6(2,) 63-65.

Board, Q. (1999). *Assumptions and origins of competency-based assessment: New*

challenges for teachers. *Library*, CT: Press.

Briggs, A. R. J., Coleman, M., & Morrison, M. (2012). (Eds). *Research methods in*

educational leadership and management. Los Angeles: SAGE.

Brundrett, M. (2000). The Question of Competence: the origins, strengths and

inadequacies of a leadership training paradigm. *School Leadership &*

Management, *20*(3), 353–369.

Brown, M., (1994). A Collection of Readings Related to Competency Based Training.

Victoria: Deakam University.

Brown, P., Hesketh, A., & Williams, S. (2003). Employability in a Knowledge-driven

Economy. *Journal of Education and Work*, *16*(2), 107–126. doi:

10.1080/1363908032000070648.

Butova, Y. (2015). Competency-Based Education, *European Scientific Journal*, *1*(2),

250–255. Retrieved from

http://www.eujournal.org/index.php/esj/article/view/5728/5535

Cael, F. (2013). *Competency-Based Education* . New York : NOE Press

Cf, D. (2009). South Africa. *Water Management*, Bemont, CA: Wasdon

Choy, S., Haukka, S. (2009). International hand book of education for the changing

world of work: Industrial attachment for instructors in TVET delivery.

Australia: Springer Link.

Cochran, G. R., & Ferrari, T. M. (2009). Preparing Youth for the 21st Century

Knowledge Economy: Youth Programs and Workforce Preparation.

Afterschool Matters, (8), 11–25.

Cordes, L. G. (2014). An In-depth Look at Millennial Preparedness for Today's

Workforce. In *The Prepared U Project* . Boston metropolitan: Bentley

University.

Creswel, J. W. (2008). *Educational research : Planning, conducting and evaluating*

quantitative and qualitative research. (3rd ed.). New Jersey : Pearson Prentice

Hall.

Curice, J., Phillips, M., & Clery, E. (2016). *Competency Based Curriculum* (2nd Ed.).

14PN:Foronet Press.

Dadi, L. (2014). *Effectiveness of Competency - based TVET Curriculum in Ethiopia :*

the Case of TVET Institutions of Oromia Regional State , 272.M:Addis.

Dasmani, A. (2011). Challenges facing technical institute graduates in practical skills

acquisition in the Upper East Region of Ghana. *Asia-Pacific Journal of*

Cooperative Education, *12*(2), 67–77.

Duodu, A. (2006). TVET in Ghana: *A Case Study, Ministry of Education and Sports*

Report Ghana Education Service, Technical and Vocational Education

Division, Accra Press.

Education, T., & Skills, C. (2010). *21ˢᵗ Century Knowledge and Education*. 40 in: More Publications.

Education, V. (2010). *NICHE strategy on Technical and Vocational Education and Training (TVET).* Foreign Affairs,P:Kigali.

Federal Ministry of Education. (2015). *Nigeria: Education for All 2015 National Review*, New Press Logos.

Gall, M.D., Gall, J. D., & Borg, W.R. (2010). *Applying educational research (* 8ᵗʰ ed.). Boston : Pearson.

Guide, A. (2014). *Key Learning Area English Language Curriculum and Assessment Guide*, (*3ʳᵈ Ed).Toul, SA*: London.

Habtamu, G. (2016). *Towards Competence-Based Technical-Vocational Education and Training in Ethiopia* . Wageningen University: TW Press.

Hailu, E. T. (2012). Analysing the Labour Outcomes of TVET in Ethiopia : Implication of Challenges and Opportunities in Productive Self-employment of TVET Graduates, (December).

Heller, J., Steiner, C., Hockemeyer, C., & Albert, D. (2006). Competence-Based Knowledge Structures for Personalised Learning. *International Journal on E Learning*, *5*(1), 75–88. doi:10.1.1.154.9437

Hodge, S. (2007). The origins of competency-based training, Australian *Journal of Adult Learning, 47*(2).

Hyland, T. (1994). *Competence, education and NVQs: dissenting perspective*s. London: Cassell.

International, L. O. (2010). *Developments and challenges in the hospitality and tourism sector*. World:PC Press.

Islam, R., & Mia, A. (2007). The role of education for rural population transformation

  in Bangladesh. *Asia-Pacific Journal of Cooperative Education, 8*(1), 1-21

Jaszay, C. (2002). Ethical Behavior in the Hospitality Industry Ethical Behavior in the

  Hospitality Industry, *20*(2), 104-116. doi: 10.1.1.425.9380.

Jervis, L. M., & Jervis, L. (2005). What is the Constructivism in Constructive

  Alignment? *Bioscience Education*, *6*(1), 1–14. doi: 2005.06000006

Jonnaert, P., Barrette, J., Masciotra, D., & Yaya, M. (2006). Rivisiting the Concept of

  Principle for Programs of Study : From Competence to Competent.

  Observatoire Des Réformes En Éducation. Retrieved from UNESCO

  Internatonal Bureau of Education

Jonnaert, P., Masciotra, D., Barrette, J., Morel, D., & Mane, Y. (2007). From

  competence in the curriculum to competence in action. *Prospects*, *37*(2), 187–

  203. https://doi.org/10.1007/s11125-007-9027-9

Jones, L., & Moore, R. (1995). Appropriating competence: the competency

  movement, the New Right and the 'culture change' project. *British Journal of*

  Education and Work, 8 (2), 78-91.

Kallioinen, O. (2007). The competence-based curriculum at Laurea. Retrieved from

  http://markkinointi.laurea.fi/julkaisut/b/b25.pdf

Kantengwa, S. (2017, March). Why being a tourist should be on your must do list?

  The New Times. Retrieved from

  http://www.newtimes.co.rw/section/read/213903/

Kessels, J.W.M., & Plomp, T. (1999). A systematic and relational approach to

  obtainingcurriculum consistency in corporate education. *Journal of*

  Curriculum Studies, 31 (6),679-709.

Keiser, J., Lawrenz, F., & Appleton, J., (2004). Technical Education Curriculum

Assessment. *Journal of vocational education research*. 29 (3), 181-194.

Kemp, S. (2011). Constructivism and Problem-Based Learning, 45–51. Retrieved

from http://www.tp.edu.sg/pbl_sandra_joy_kemp.pdf

King, S. B. (2015). Competency-based education. *JACC: Cardiovascular*

Interventions, *8*(2), 374–375. doi :10.1016/j.jcin.2014.12.219.

Knani, M. (2014). Ethics in the Hospitality Industry : Review and Research Agenda.

International Journal of Business and Management, *9*(3), 1–8.

doi:10.5539/ijbm.v9n3p1

Kong, I. H. (2013). Tourism and Hospitality Studies, 169–178. Retrieved on

23/5/2017 from http://www.edb.gov.hk/en/curriculum-

development/kla/pshe/nss-curriculum/tourism-and-hospitality-

studies/index.html.

Kouwenhoven, W. (2003). *Designing for Competence in Mozambique.*The

Netherlands-Holland

Kouwenhoven, W. (2010). Competence-based curriculum development in higher

education: Some African experiences. *Access and Expansion: Challenges for*

Higher Education Improvement in Developing Countries, 225–246.

Kufaine, N., & Chitera, N. (2013). Competency based education and training in

technical education problems and perspectives. *International Journal of*

Vocational and Technical Education, *5*(3), 37–41. doi:

org/10.5897/ijvte2013.0119.

Labarre, K. B. (2013). *Through Competence-Based to Employment-Oriented*

Education and Training (2nd Edition). Berlin: GIZ Deutsche Gesellschaft für.

Luambano, S. (2014). *The implementation of constructivist approach in competency-*

based curriculum: a case of geography teaching in selected secondary schools

in songea municipality (Unpublished masters dissertation).The Open
University of Tanzania.

Mackenzie, M., Chan, B., & Tse, T. (2009). Manual on Module II Introduction to
Hospitality, 246. Retrieved from
http://www.edb.gov.hk/attachment/en/curriculum-development/kla/pshe/nss-
curriculum/tourism-and-hospitality-
studies/Introduction_to_Hospitality_Eng.pdf

Mahmood, T. (2004).Occupational standards quality assurance and accreditation
performance criteria. Retrieved on 13/5/2017 from
htt:www.apacc4hrd.org/conf workshop/apacc04/TP/05.

Mazimhaka, J. (2007). Diversifying Rwanda's tourism industry: a role for domestic
tourism. *Development Southern Africa*, *24*(3), 491–504. doi:
10.1080/03768350701445590.

Mbarushimana, N. & Kuboja, J. M. (2016). A paradigm shift towards competence
based curriculum : *Saudi Journal of Business and Management Studies, 1*(1),
6-7.

Mcclarty, K. L., & Gaertner, M. N. (2015). *Measuring,* RA:Tenas ,SA Press.

Merrian, S. B. (2009). *Qualitative research: A guide to design and implementation*.
USA: Jossey- Brass.

Mertineit, K.-D. (2013). TVET for a Green Economy.Gtz.De. BMZ Berlin: Top
Kopie GmbH, Frankfurt. Retrieved from
http://www2.gtz.de/wbf/4tDx9kw63gma/giz-2013-en-TVET for a Green
Economy.pdf

Millar, M., Mao, Z., & Moreo, P. (2010). Hospitality & tourism educators vs. the
industry: A competency assessment. *Journal of Hospitality & Tourism*

Education, 22(2), 38–51, doi: 10.1080/10963758.2010.10696975

MINEDUC. (2015). *Rwanda TVET Policy*. Kigali: Ministry of Education.

MINICOM. (2009). *Republic of Rwanda, Rwanda Tourism Policy. 1-35*.Kigali.

Mohamed, M., Wahba, M., & Assurance, C. (2013). *Technical and Vocational
     Education and Training (TVET) Challenges and Priorities in Developing
     Countries.* Colorado Press TS Books.

Moe., S.T. (2007). *Ethiopian TVET- System, Guideline and recommendations on
     Curriculum development*. Addis Ababa: TK Ad Press .

Mohamed, M., Wahba, M., & Assurance, C. (2013). Technical and Vocational
     Education and Training (TVET) Challenges and Priorities in Developing
     Countries, 1–11: AC Books

Morcke, A. M., Dornan, T., & Eika, B. (2013). Outcome competency based
     education: An exploration of its origins, theoretical basis, and empirical
     evidence. *Advances in Health Sciences Education*, *18*(4), 851–863. doi
     :10.1007/s10459-012-9405-9

Mubiri, J. (2016). *Customer Satisfaction in Hotel Services. Case-Lake Kivu Serena
     Hotel* (Masters dissertation)Retrieved from
     http://publications.theseus.fi/handle/10024/114578.

Nanzhao, Z., Muju, Z., Baohua, Y., Wenjing, W., Xia, G., & Li, Z. (2011).
     Educational Reform and Curriculum Change in China : A Comparative Case
     Study, 51 E:China Press.

Nauta, W. (2014). *Korean Assistance in the Field of Technical and Vocational
     Education and Training in Rwanda : implementing an East-Asian development
     model,* NB:Collection Korea Press.

Netherlands Ministry of Foreign Affairs. (2009). Strategy on Technical and

Vocational Education and Training. Retrieved from
https://www.nuffic.nl/en/files/documents/niche-strategy-on-technical-and-
vocational-education-and-training-tvet.pdf/view

Nikolov, R., Shoikova, E., & Kovatcheva, E. (2014). Competence Based Framework
for Curriculum Development. Publisher: Za bukvite, O'pismeneh

Nolder, R. (1990). Accommodating Curriculum change in Mathematics: Teacher's
dilemmas: Mexico City, Mexico.

Nyback, M. (2013). A constructivist approach to teaching and learning at the degree
programme in nursing at novia university of applied sciences, 1–20. Retrieved
from http://www.novia.fi/assets/filer/Publikationer/Serie-R-
rapporter/Teaching-and-learning-6.2013.pdf

Obwoge, M. E. (2016). Competency Based Education and Training : A Fresh Green
Leaf from the Australian Context for TVET in Africa. *International Journal of
Education & Multidisciplinary Studies*, *3*(3), 538–545. doi:
10.21013/jems.v3.n3.p23.

Oketch, M. (2007), To vocationalize or not to vocationalize? Perspectives on current
trends and issues in Technical and Vocational Education and Training (TVET)
in Africa. International Journal of Educational Development (27) 220-234.
London: university of London.

Okoye, K. R., & Isaac., M. O. (2015). Enhancing Technical and Vocational Education
and Training (TVET) in Nigeria for Sustainable Development : Competency-
Based Training (CBT) Approach. *Journal of Education and Practice*, *6*(29),
66–69

Opertti, R. (2007). *Competency-based approaches and the implementation of*

curriculum change in the Latin American region: current processes and pending challenges (2nd ed.). Boston: PA Press

Ogbunaya, T. C., & Udoudo, E. S. (2015). Repositioning Technical and Vocational Education and Training (TVET) for Youths Employment and National Security in Nigeria, *Journal of Edcuation and Practice*. *6*(32), 141–147. Retrieved from https://eric.ed.gov/?id=EJ1083539

Parry, S.R. (1996). The Quest for Competence. *Training Magazine*, *6*(7), 48-56 Retrieved from http://www.nwlink.com/~donclark/hrd/case/compet1.html.

Paul, E. (1996). Constructivist Views of Learning in Science and Mathematics. *ERIC Digest*, *4*(3), 4-7. Retrieved from https://www.ericdigests.org/2004-3/views.html.

Pavlova, M. (2014). TVET as an important factor in country's economic development. *SpringerPlus Journal*, *3*(1). doi: 10.1186/2193-1801-3-S1-K3

Punch, K.F. (2009). *Introducation to research methods in education.* Los Angeles: SAGE.

Republic of Rwanda. (2013). *Economic development and poverty reduction strategy 2*. KT Kigali Press.

Rahman, I. (2010). *Students ' Perceptions of Effectiveness of Hospitality Curricula and Their Preparedness.* Nunt Press, London.

RDBR. (2016). Rwanda Destination. Retrived from http://rwandatourism.com/.

Rwanda Development Board. (2012). *Rwanda Skills Survey 2012: ICT Sector Report*.Impremerie-Kigali.

Scott, B. D., & Publica, C. (1991). Customer Satisfaction The Other Half of Your Job. *Journals of Sagepub*, *3*(31), 45-61, doi: 10.1177/109467050031002.

Schwarz, G. & Canever, L.A. (1994). Outcome-based education and curriculum

change: Advocacy practice and critique. *Journal of curriculum and Supervision. (3)*4, 326-338.

Sharma, A. (2008). *Technical Vocational Education and Training (TVET) in Africa*. Addis Ababa: AU.

Somekh, B., & Lewin, C (Eds) (2011). *Theory and methods in social research* (2nd ed.). Washington, D.C : Sage

Thomas D. A., Hdl Silke H. D., & Martin, M. (2005). *Structures and functions of Competency-based Education and Training (CBET): a comparative perspective*. MN Press :Käthe-Kollwitz-Straße 15.

Thompson, D., Bell, T., Andreae, P., & Robins, A. (2013). The role of teachers in implementing curriculum changes. *Proceeding of the 44th ACM Technical Symposium on Computer Science Education (SlGCSE '13)*, 245–250.

Snyder, J, Bolin F. and Zuwart, K. (1992). Curriculum innovation. In Jackson, P.W. *Handbook of research on curriculum*. Macmillan. New York, united state

Sriyam, A. (2010). *Customer Satisfaction towards service quality of front office staff at the Hotel.* Business English for International: Books Press Srinakharinwirot University.

Sudsomboon, W. (2007). Construction of competency based curriculum content framework for mechanical technology education**.** Bangkok: King Monguts University of Technology.

Symth, R. (2004). Exploring the usefulness of a conceptual framework as research tool : A researcher's reflection, *Journal of Issues in Education Research, 14*(2), 167-180. retrieved from http://iier.org.au/iier14/smyth.html

Suartini, T. S., & Setabudhi., P. (2010). *Implementation of efficiency approach to*

the model of competence-based vocational education in vocational school

curriculum. Bandung: Kejuran University.

Sullivan, N. O. (2014). Teaching and Learning in Competency-Based Education .

The Fifth International Conference on e-Learning, 22-23 Belgrade, Serbia.

Unesco, B. R. O. (2008). Competency-based curriculum development : some lessons

from other regions, 5–9. Retrieved from

https://www.google.com/#q=guatemala+and+competency+based+curriculum+

WDA. (2014). *Putting Skills at the Heart of Economic Success*. *Workforce*

Development Authority: Year Book (2nd Edition). Ministry of Education:

Watson, A. (2017). Competency-based vocational education : Is this the answer ?.

doi.org/10.1080/03115519108619445.

Weegar, M., & Pacis, D. (2012). A Comparison of Two Theories of Learning --

Behaviorism and Constructivism as applied to Face-to-Face and Online

Learning. *E-Leader Manila*, 1–20.

Wheelahan, L. (2007). How competency-based training locks the working class out of

powerful knowledge: a modified Bernsteinian analysis. *British Journal of*

Sociology of Education, *28*(5), 637–651. doi: 10.1080/01425690701505540.

Wikh, W., Ri, U., Sadshu, W. K. H., Fkohvy, P., Wkh, R., & Hduv, S. (2000).

Developments in Australia ' s Vocational Education, MS Publications.

APPENDICES

Appendix 1: Questionnaire for Graduates

Competency-Based curriculum in Tourism and hospitality: Implementation and perceived impact on workforce preparedness in Southern Province, Rwanda.

Dear Graduates,

I am pleased to inform you that you have been selected to be a respondent for this study which is carried out on **Competency-Based curriculum in Tourism and hospitality: Implementation and perceived impact on workforce preparedness in Southern Province, Rwanda** by Mr MBARUSHIMANA Nelson, a PhD Candidate at University of Eastern Africa, Baraton, Kenya. Kindly provide true information to facilitate accomplishment of this study. The responses you provide are for academic purposes only and will be treated with utmost confidentiality.

The questionnaire is anonymous. Do not fill your name. Thank you!

A. Demographic Information: Please tick what is appropriate:

1. Your gender: ( ) Male   ( ) Female

2. Your age: ( )20 and below ,( )21-25, ( )26 -30 , ( )31 -35 , ( )36 and above

3. Your Marital Status: ( ) Single, ( ) Married

4. Name of VTC you graduated from :.....................

5. Status of VTC where you graduated   ( ) Day , ( ) Boarding

6. Year of graduation : ( ) 2016, ( ) 2015, ( ) 2014, ( ) 2013, ( ) 2012

B. **Instruction:** Please tick the number that best describes your personal feelings in regard to competency-based curriculum in TVET and its impact on workforce preparedness

    1 = Disagree   2= Tend to Disagree   3 = Tend to Agree   4= Agree

	WORKFORCE PREPAREDNESS				
	Competence	**1**	**2**	**3**	**4**
7	I maintain health and safety, and sustain the environment in the workplace				
8	I communicate effectively to customers in the workplace				
9	I apply computer skills in the workplace				

		1	2	3	4
10	I have skills, knowledge and attitudes required to apply hygiene and food safety in the workplace				
11	I possess skills, knowledge and attitudes required to handle and store food accordingly.				
12	I have the skills and knowledge required to use kitchen equipment and tools, to prepare *mise-en-place* of the different ingredients, using the proper cutting and preparation techniques.				
13	I have the skills and knowledge required to use basic cooking methods and cook basic dishes				
14	I communicate fluently in English, French and Swahili				
15	I am able to create and manage a small business related to culinary art				
16	I am capable of transferring competency based knowledge I acquired into actual practice on the ground				
17	I compete well in the market based on the knowledge I acquired from competency based curriculum program				
18	I feel I need more knowledge to better my professional skills				
19	I am capable to teach others the skills I acquired from competence based curriculum				
20	I am able to offer my skills/product anywhere in the world				
21	I have learned public relations skills to collaborate with the industries.				
	Future prospects	**1**	**2**	**3**	**4**
22	There is room for further studies after successful completion of competency based curriculum				
23	The knowledge, skills and attitudes I acquired in competence based curriculum are durable and sustainable				
24	Employability is guaranteed through the completion of competence based curriculum program				
25	I am confident enough to face the world of work.				
26	I am confident to recommend a colleague to enrol in competency based TVET program,				
27	Competency based TVET program is useful to the individual and the society				
28	Competency based TVET program develops positive attitude of graduates towards work				
29	Competency based TVET affects creativity and logical thinking of graduates towards entrepreneurship				
30	Competency based TVET program curriculum helps the graduates to cope up with rapidly changing world				
31	Competency based TVET program can alleviate unemployment problem				
32	Competency based TVET program provides skills that graduates need in their life after school				
	Work Ethics	**1**	**2**	**3**	**4**
33	I have been trained to demonstrate behavior and attitudes that are appropriate for the workplace				
34	I understand that workplaces have policies and procedures that need to be followed				

		1	2	3	4
35	I am familiar with the rights and responsibilities of workers and employers have explored ways to exercise rights in the workplace.				
36	I have been trained to handle customers with respect and care				
37	I received training on being honest, reliable and responsible at work				
38	I display integrity- does not tell lies, accept bribes, cheat, and violate rules or tolerate corruption				
	Time Management	**1**	**2**	**3**	**4**
39	I have been trained to demonstrate promptness in service delivery				
40	I know the importance of task planning and managing time				
41	I know how to answer quickly questions from customers				
42	I have been trained to provide services as promised on time				
	COMPETENCY BASED CURRICULUM IMPLEMENTATION				
	Identification of Competencies	**1**	**2**	**3**	**4**
43	Competencies to be achieved were derived from occupational needs of the industries.				
44	Competencies to be achieved were repeatedly and clearly explained				
45	Competencies to be achieved were updated continuously to meet the needs of the industries.				
46	Competencies to be achieved were specific and precise.				
47	My school and the industries worked together to identify the competencies needed in the workplace.				
48	The industries positively invited us to practice the competencies identified to be achieved.				
	Teaching-learning process	**1**	**2**	**3**	**4**
49	The role of instructors was the facilitator of learning				
50	In teaching learning activities knowledge, skill and attitude were integrated				
51	Teaching learning activities were interactive and engaging				
52	Hands on activities occurred immediately after presentation of new topic				
53	Learning activities took place in several real situations				
54	I was learning at my own pace				
55	I demonstrated my competencies during learning				
56	Learning was field cantered using realistic work situation				
57	Instruction of each task package was supported by practice				
58	Incorrect practices in instruction for each task package was detected and corrected				
59	Learning activity was reinforced until competency was achieved				
	Learning Resources	**1**	**2**	**3**	**4**
60	Cooking machines ,equipment for kitchen were available and well organized				
61	Practical materials for instruction were appropriate for the tasks				
62	Material for Mise en Place were available and sufficient				

		1	2	3	4
63	Practical materials were available for every task				
64	Kitchen equipment and utensils were relevant to the occupation in the world of work				
65	Learning materials were effectively utilized during instruction				
66	Learning materials were comprehensive				
67	Appropriate equipment and technology were selected for particular cooking methods.				
	Assessment	**1**	**2**	**3**	**4**
68	Assessment engaged me in applying knowledge in the same way as they are used in the real world outside of school.				
69	Assessment engaged me in applying skills in the same way as they are used in the real world inside of school.				
70	Assessment was continuous				
71	Assessment was based on demonstration of competency				
72	I was aware that assessment was based on occupational standards.				
73	I was aware of how and when competencies will be evaluated				
74	Assessment integrated knowledge, skills and attitude.				
75	Immediate feedback was provided to us on performance after each practice.				
76	I was allowed to practice tasks correctly before being evaluated.				

THANK YOU VERY MUCH

Appendix 2: Focus Group Discussion 1

GROUP	: Graduates from VTC offering Tourism and Hospitality courses in Culinary Arts.
TIME SPENT	: One Hour
DATE	: April 13rd, 2017
RECORDING	: Self recording
GHS	: Graduate from Huye district Southern Province

RESEACHER : I would like you to thank you for accepting this invitation and come to this focus group discussion, thank you. I have 5 questions to ask, you will express yourself, and you will give your views and opinions. Remember that the purpose of this group discussion is to find out your perceptions on the program you graduated from (Competency-Based Curriculum) in VTC offering tourism and hospitality courses in Culinary Art. Your views and comments as graduates will help to make recommendations to the concern stakeholder s at the end of this study.

RESEARCHER : How did the teaching-learning process and identification of competencies to be achieved took place in you classes before you graduate?

GHS4 : Competencies to be achieved were not repeatedly and clearly explained by all lecturers some did and others did not, but I was inspired to hear what I had to focus on during my learning.

GHS8 : Our teacher of French kept reminding us to pronounce in French like a French from France. Teaching and Learning was smoothly done our teachers were qualified but they did note tell us what we were supposed to demonstrate at the end of the lesson.

GHS9	: when I was studying at VTC I liked our teacher who taught us Hygiene and Food Safety. I mastered competencies related to maintain workplace hygiene, Clean, sanitise and store equipment and applying food safety procedures, he was engaging the entire class in his way of teaching, he was nice.
GHS 8	: I know preparing Cake for wedding because the teacher who taught us was an expert in that, it was not easy for me to continue my studies because I have 3 children and I have to take care of them.
GHS3	: This meeting is really interesting and thank you for the drink you have given us, I graduated in 2014 in IPRC South in Culinary Art our teacher who taught us the module of Health, safety and environment in the workplace used to tell us that what will be required to us in work place is Maintain personal hygiene, address unsafe situations on the job, respond appropriately to emergencies at work and sustain environment. He kept saying it our classes. For sure I liked the course and I passed it well I'm happy because I'm applying what we learnt in that module''
RESEARCHER	: What is your feeling about the use of learning resources used by teachers and how were you evaluated at the end of your subjects before you graduate?
GHS9	:I graduated in 2014 the first trimester the school did not have enough materials for practical and learning but in the second trimester WDA sent equipments for kitchen, from that time learning materials were available at my school.
GHS1	: 2/4 of our teachers told us that each assessment prepared us to the workforce'' he continued talking to me directly saying ''I'm sending you according to my experience I have now go and tell those teachers to assess our little brothers according to what is needed in the workforce.
GHS8	: you cannot compete with one who studied at VTC which has all learning material. My dream was to go to IPRC South

	unfortunately I was not selected because many students applied.
GHS11	: To me the assessment was well done I did not have any problem on it.
GHS13	: I graduated from IPRC but I can give thee testimony that I enjoyed the time I spent there, learning materials were sufficient and available and the assessment was well given.
RESEARCHER	: What is you view on the impact of the program you graduated from in VTC offering Tourism and Hospitality courses in Culinary Arts in terms on being competent and managing time at your place of work ?
GHS10	: I was motivated to work hard in Culinary Arts because I knew that we are needed in the market.
GHS3	: It took me one year to be familiar with the industry because during my studies I acquired hands on skills, attitudes and knowledge for the industry, I compete well but the salary is still small please make an advocacy when you will reach stakeholders in Rwanda Development Board.
GHS7	: At my work place I work in service I know hot to manage my customers I have not heard from my supervisors that even one time I delayed to serve them, I'm very proud of it. Some of our teachers gave an emphasis on time management.
GHS14	: Even now I still have some challenges in communicating in English and French, at my age I have many responsibilities at home I cannot go back to school. I will need some training for 3 months.
RESEARCHER	: What opinions do you have towards skills, knowledge and attitudes you acquired from VTC offering Tourism and Hospitality courses in Culinary Arts in terms of Works ethics and Future Prospects?
GHS6	: My teacher of Food Production used to tell us how ethically we should behave towards customers and our employers, that has helped me to who I'm now.

GHS13	: Yes the skills and knowledge I acquired at VTC where I graduated are durable and sustainable. We are applying what we learnt for instance last year I was the best employee at my place of work. My picture was at the reception for one year.
GHS6	: The knowledge I acquire is durable, I can even teach another person how to prepare mise en place using different ingredients. I go back to school next year.
RESEARCHER	: How can the TVET program on tourism and hospitality be relevant to the workforce needs of the industry?
GHSS11	: The focus should be put on teaching and learning with qualified teachers. Equipment and learning Materials have to be sufficient.
GHS11	: Because Tourism and Hospitality have been identified as the economy pillar of Rwanda , the government should avail scholarship in TVET from Level 3 up to level 7.
GHS3	: A big emphasis should be put on identification of competencies to be achieved and student have to be aware of those competencies.
GHS9	: The government has to build a model TVET school offering courses related on Tourism and Hospitality in each district in the country. There is a need to increase the number of hours related to languages.

Appendix 3: Focus Group Discussion 2

GROUP	**:** Graduates from VTC offering Tourism and Hospitality courses in Culinary Arts.
TIME SPENT	**:** One Hour
DATE	**:** April 20th , 2017
RECORDING	**:** Self recording
GRS	**:** Graduate from Ruhango district Southern Province

RESEACHER : I would like you to thank you for accepting this invitation and come to this focus group discussion, thank you. I have 5 questions to ask, you will express yourself, and you will give your views and opinions. Remember that the purpose of this group discussion is to find out your perceptions on the program you graduated from (Competency-Based Curriculum) in VTC offering tourism and hospitality courses in Culinary Art. Your views and comments as graduates will help to make recommendations to the concern stakeholder s at the end of this study.

RESEARCHER : How did the teaching-learning process and identification of competencies to be achieved took place in you classes before you graduate?

GRS1 : Our teacher of Food Production used to tell us sometimes when he was absent in class that he was invited to be part of curriculum development in Kigali and was emphasizing to have hands on skills in his course especially in cooking.

GRS8 : competencies to be achieved were not hundred per cent specific and precise.

GRS10 : Teaching and Learning was done in two languages: Kinyarwanda and English but were supposed to learn in English.

GRS14	**:** I'm performing well here because teachers who taught us were from University of Tourism Technology and Business Studies they have knowledge and skills they are good.
GRS7	**:** I'm supervisor of the kitchen where I work this is not by chance. Skills, attitudes and knowledge I acquired from my school helped me to compete with others and I have be appointed as their supervisor.
GRS8	**:** I still remember a teacher who taught us Food Storage he was emphasizing on how to select the type of food to be stored, how to maintain storage area , storage conditions, store food and apply proper storage procedures. When I started my first job , I was given to be the store manager where I took the opportunity to apply those skills I acquired………. , I'm happy''
RESEARCHER	**:** What is your feeling about the use of learning resources used by teachers and how were you evaluated at the end of your subjects before you graduate.
GRS3	**:** where I graduated from, we have spent almost one trimester and t the assessment was only theory. Our school had financial problems.
GRS12	**:** During my time we suffered because learning material like equipments from the kitchen were not there we did much of theory than practices.
GRS14	**:** I was not happy about the kitchen equipments there are some practices we did not do because of lack of kitchen equipments, fortunately when I joined the workforce I manage to practice where I work in the kitchen.
GRS4	**:** Assessment was done but corrections were done rarely
RESEARCHER	**:** What is you view on the impact of the program you graduated from in VTC offering Tourism and Hospitality courses in Culinary Arts in terms on being competent and managing time at your place of work ?

GRS11	**:** I compete in the market and I have managed to open a small restaurant in my Village near the market. Now I have clients who come for their breakfast, lunch and supper. I will continue my studies next year in Level 4 at Mpanda VTC. My wife will help me to manage the restaurant and I taught her some techniques of cooking.
GRS15	**:** Time management during my service is perfect sometimes I receive a token of appreciation from my customers I serve as promised. During our time of studying our teachers did not empower us in languages sometimes it is too hard to communicate in English and French.
RESEARCHER	**:** What opinions do you have towards skills, knowledge and attitudes you acquired from VTC offering Tourism and Hospitality courses in Culinary Arts in terms of Works ethics and Future Prospects?
GRS12	**:** when it comes to practical I don't have any challenge, I perform well and convince people, but when it comes to speak in English I feel that I'm not confident enough. For me I can give a suggestion, school Manager have to increase number of hours in languages this will help future graduates to be more comfortable in tourism and Hospitality Industry.
GRS5	**:** We are SMART! , I cannot lack a job for your info during week a have a part time job a have a contract with a company dealing with catering in weddings in Kigali! My job is to prepare Mise en Place for them and serve invitees.
GRS10	**:** I want to go back to school to upgrade my skills because where I graduated from did not have enough material for practical, I spent there one year and half! I'm critised some times by my colleagues.
RESEARCHER	**:** How can the TVET program on tourism and hospitality be relevant to the workforce needs of the industry?

GRS1   : A focus has to be given to communication skills and sufficient kitchen equipment. Lectures in TVET must have bachelor's degree in tourism and hospitality. The industrial attachment of students finishing Level 3 should be done in Hotels having three stars.

GRS5   : I liked this discussion, the focus has to be put on the assessment, the assessment at the end of each subject should be focused on the competencies needed by the workforce in the tourism and hospitality industry.

Appendix 4: Focus Group Discussion 3

GROUP : Graduates from VTC offering Tourism and Hospitality courses in Culinary Arts.

TIME SPENT : One Hour

DATE : April 24th , 2017

RECORDING : Self recording

GKS : Graduate from Kamonyi district Southern Province

RESEARCHER : I would like you to thank you for accepting this invitation and come to this focus group discussion, thank you. I have 5 questions to ask, you will express yourself, and you will give your views and opinions. Remember that the purpose of this group discussion is to find out your perceptions on the program you graduated from (Competency-Based Curriculum) in VTC offering tourism and hospitality courses in Culinary Art. Your views and comments as graduates will help to make recommendations to the concern stakeholder s at the end of this study.

RESEARCHER : How did the teaching-learning process and identification of competencies to be achieved took place in you classes before you graduate?

GKS10 : when our parents pay school fees for our studies we have right to know what kind of competencies I need to show at the end of my studies so that I can get prepared. Nothing about competencies I heard during my classes.

GKS1 : it is my first time to hear this, competencies! No one did not mention this in class but I was among the best student this discussion is interesting.

RESEARCHER : Let me make some clarifications on competencies, competence is the result of a combination of knowledge and

skills. This integration is demonstrated when the learner is able to achieve specific results and performances, understand what he/she does and do it autonomously. Learners in tourism and hospitality demonstrate competencies related to what they have learnt at the end of training.

GKS1 : After your explanation my response remains the same

GKS6 : I graduated in 2016 our teachers used to tell us what were are supposed to achieve at the end of our program. For instance the teacher of Food storage used to tell us that we should be every time having 4 S which means the first S=Smile the second S=Smart , the 3 S=Speaking languages fluently and the last S which is very important is to Smile.

RESEARCHER : I see your teacher was good

GKS6 : Yes he was among the best we had as teachers. He has en experience in the hospitality industry.

RESEARCHER : What is your feeling about the use of learning resources used by teachers and how were you evaluated at the end of your subjects before you graduate?

GNS4 : I was preparing for exams because I needed marks. I did not know that it had a purpose of preparing us to work.

GNS2 : where I graduated from, we have spent almost one trimester and t the assessment was only theory. Our school had financial problems.

GKS6 : The school did not have materials for practical purposes they kept telling us that they ordered them.

GNS1 : where I graduated from in 2015 before doing the final exam from WDA our teachers have a culture to bring all exams done previously and were done as assignments and final exam, this has helped me to know what is needed in the tourism and hospitality industry.

GKS8 : When our cohort started the level 3 we suffered so much to have equipment in the kitchen, it was during our last trimester that those equipment was brought but were not sufficient.

RESEARCHER	**:** What is you view on the impact of the program you graduated from in VTC offering Tourism and Hospitality courses in Culinary Arts in terms on being competent and managing time at your place of work ?
GKS12	**:** Yeah! the program helped me so much even if I spent 6 months looking for a job but since I got it I'm having experience and I'm planning to get married next August 2017 with my classmates Jolly and we have a vision to have our own business related to Culinary Arts. I'm an expert of doing a well designed Mise en Place and decorate tables in restaurant with a special design.
GKS7	**:** I work but among courses we learnt and up to now I still have challenges are computer skills and communication skills (English, French and Swahili .
GSK9	**:** I'm confident about the knowledge I acquired but I still want to upgrade my skills in Level 4. For instance I don't have parents since 2011 they have all passed away during an accident, to find a scholarship is not is for me but I know that I will manage to realize my dreams.
RESEARCHER	**:** What opinions do you have towards skills, knowledge and attitudes you acquired from VTC offering Tourism and Hospitality courses in Culinary Arts in terms of Works ethics and Future Prospects?
GKS7	: we are not good in speaking English because our teachers did not give an emphasis on it.
GKS14	**:**I graduated from Kigese VTC it was in 2013 I worked for two years in a Hotel in Kigali and as I was gaining Money I decided to upgrade my skills I continued my studies now I'm an undergraduate student at the University of Tourism Technology and Business Studies.

GKS5   : I can confirm that my classmates we graduated together they have all jobs. In our country, Restaurants and hotels are growing very faster and they have to employ only those having at least a certificate in Hospitality this is according to Rwanda Development Board which has responsibilities to coordinate the tourism and hospitality Industry.

GKS14   : the skills, knowledge and attitudes we acquired from VTCs helped us to have an association of doing catering during weekends every member contributes each month 5000 Rfw non in our account we have around 245000 Rfw. I think in the future our association will have its own restaurant in Park station in Kigali.

RESEARCHER   : How can the TVET program on tourism and hospitality be relevant to the workforce needs of the industry?

GKS1   : Students must be communicated about competencies to be achieved at the end of each program

GKS14   : Teaching –learning and assessment should focus on the competencies to be achieved

Appendix 5: Pictures VTC selected for this research

Appendix 6: Interview Schedule 1

INTERVIEWEE   : Hotel Manager 1

TIME SPENT   : 30 Minutes

RECORDING   : Self recording

INTERVIEWER   **:** Dear Mr. A, I want to take this opportunity to thank you for your time and positive feedback to my request to come here for this interview. As we start the first question is: To what extent is the TVET program on tourism and hospitality in Culinary Art relevant to the workforce needs of the industry?

INTERVIEWEE   **:** Thank you for your question since I started this job of managing hotel 9 years ago, used to have workers who did not have any skills, attitudes and knowledge on what is happing the hospitality industry especially the Hotel one. We used to train them and equip them with the knowledge we had but it was taking long and sometimes it was not efficient. With this new system of having graduates from VTC it has played a big role on our daily management of this hotel, at least I have aperson skilled in each department. I have 3 of them here. To me the program is relevant to the tourism and hospitality especially in Culinary Art.

INTERVIEWER   **:** What are strengths and weaknesses of graduates from VTC?

INTERVIEWEE   **:** '' Ahooo'' which means you have touched the point. He continued saying: ''Today Rwanda has became a Meeting Incentives Conferences and Events destination we need people who can talk to our customers! The graduates from VTCs on the practical side they are okey but when it comes to communicate in English and French Heheheee ! It is a big problem.
I know know also VTCs that have trained their students to provide services as promised on time. Those students know

how to plan and manage time accordingly, they have qualified teachers.

INTERVIEWER : Are you involved in competencies identification in tourism and hospitality for the workforce?

INTERVIEWEE : My hotel allow trainees from Tourism and Hospitality schools to come and do practical exercises in the kitchen, housekeeping and at front office, they are our future employees but those schools don't invite us to discuss on competencies needed in workforce, there is a need to work on this because we can tell the story, we are on the ground.

INTERVIEWER : How can the TVET program on tourism and hospitality be relevant to the workforce needs of the industry?

INTERVIEWEE : school manager must employ lecturers qualified in the area and those teachers must have bachelor's degree in tourism and hotel management because. This will play a big role in teaching and learning process. I know current teachers in VTCs most of them they have secondary certificates!

Appendix 7: Interview Schedule 2

INTERVIEWEE   : Hotel Manager 2

TIME SPENT   : 30 Minutes

RECORDING   : Self recording

INTERVIEWER   **:** Dear Mr. B, I want to take this opportunity to thank you for your time and positive feedback to my request to come here for this interview. As we start the first question: is To what extent is the TVET program on tourism and hospitality in Culinary Art relevant to the workforce needs of the industry?

INTERVIEWEE   **:** Thank you for your question it is my first time I'm going to be interviewed but I will try. My view to that question is that... it is true that TVET programs in Culinary Art have empowered our youth and they are getting jobs which is totally different from what was there before! Now at least they can find where to work because we need them. These graduates from these schools they are helping too much but we cannot say that they are the best!

INTERVIEWER   **:** What are strengths and weaknesses of graduates from VTC?

INTERVIEWEE   **:** My hotel allow trainees from Tourism and Hospitality schools to come and do practical exercises in the kitchen, housekeeping and at front office, they are our future employees. These schools are still lagging behind on the side of equipments. It is true , some of our employees who graduated from those VTCs sometimes they don't know how to manipulates cooking machines and some materials in the kitchen, I have ordered to give them some trainings before they start officially that, before they start working. Some headmasters are requesting partnership with my hotel to do practical in my Hotel. Another weakness they have to face is on the side of communication skills. The hospitality industry needs works who can attract customers and handle quickly their concern in service delivery.

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INTERVIEWER   **:** Are you involved in competencies identification in tourism and hospitality for the workforce?

INTERVIEWEE   **:** I have never been called to give my view on the competencies to be identified in this area. I have experience and I can help and give my contribution.

INTERVIEWER   **:** How can the TVET program on tourism and hospitality be relevant to the workforce needs of the industry?

INTERVIEWEE   **:** These TVET schools needs to involved us in identification of competency to be achieved by graduates because when those graduates finish their studies they come to us for the employment. They need also to by equipments for the kitchen and learning materials this will help graduates to be familiar with what is happing in the real industry.

Appendix 8: Interview Schedule 3

INTERVIEWEE   : Hotel Manager 3

TIME SPENT   : 30 Minutes

RECORDING   : Self recording

INTERVIEWER   **:** Dear Mr. B, I want to take this opportunity to thank you for your time and positive feedback to my request to come here for this interview. As we start the first question: is To what extent is the TVET program on tourism and hospitality in Culinary Art relevant to the workforce needs of the industry?

INTERVIEWEE   : The program of TVET on tourism and hospitality has played a role in this Industry. For instance I have 6 students who finished in this program in Culinary Art and food and beverage services. They have knowledge and attitude for the job. We used to have those not skilled, for your info I cannot now employ someone who does not have a certificate in the area of hotel.

INTERVIEWER   **:** What are strengths and weaknesses of graduates from VTC?

INTERVIEWEE   **:** Practically these graduates are good, they work very hard to perform a given task and they do it quickly but when it comes to theory it becomes a problem. When this hotel started in 2009 I used to have workers who did not go to school to study hospitality courses but when the VTC offering these courses in Culinary Art started producing graduates I recruited four and we are still together ! I know those VTCs that have trained their students to provide services as promised on time. Those students know how to plan and manage time accordingly, they have qualified teachers

INTERVIEWER   **:** Are you involved in competencies identification in tourism and hospitality for the workforce?

INTERVIWEE   **:** We are not involved, this is because probably they don't need us.

INTERVIEWER   : How can the TVET program on tourism and hospitality be relevant to the workforce needs of the industry?

INTERVIEWEE   : TVET schools offering tourism and hospitality courses have to involve hotels in identification of competencies we can tell them what is needed by our customers. Schools Manager must come to us and give them feedback on how their trainees are performing during their industrial attachments; this will help them to correct the negative side.

Appendix 9: Focus Group Discussion guide for graduates

1. How did the teaching-learning process and identification of competencies to be achieved took place in you classes before you graduate?

2. What is your feeling about the use of learning resources teachers used and how are you evaluated at the end of your subjects?

3. What is you view on the impact of the program you graduated from in VTC offering Tourism and Hospitality courses in Culinary Arts in terms on being competent and managing time at your place of work ?

4. What opinions do you have towards skills, knowledge and attitudes you acquired from VTC offering Tourism and Hospitality courses in Culinary Arts in terms of Works ethics and Future Prospects?

Appendix 10: Interview guide for Hotel Manager

1. To what extent is the TVET program on tourism and hospitality in Culinary Arts relevant to the workforce needs of the industry?

2. What are strengths and weaknesses of graduates from VTC?

3. Are you involved in competencies identification in tourism and hospitality for the workforce?

4. How can the TVET program on tourism and hospitality be relevant to the workforce needs of the industry?

Appendix 11: Observation Schedule 1

CLASS   : VTC Level 3 , Culinary Arts

SUBJECT   : Culinary

TOPIC   : How to make a carrot soup

TIME   : 2 hours

METHOD   : Lecture –Questions-Answer Method

TEACHER   : Dear students today we are going to study how to make CARROT SOUP. But before I start who can remind what we have seen in previous lesson?

STUDENT 1   : Hygiene and safety

TEACHER   **:** Who can tell us in summary what we studies exactly?

STUDENT 2   : Professional attire is worn, Workplace is well cleaned, Food items are handled hygienically Professional handling of tools and equipment (cutting) is respected

TEACHER   : Very Good. Now to prepare Carrot Soup the following directions has to be followed. Come near me so that you can seen and follow everything I'm going to do and demonstrate.

                               Directions

1. Combine carrots, chicken broth, and onion in a large pot. ...
2. Bring the liquid to a boil, reduce heat to medium-low, place a cover on the pot, and simmer the mixture until the carrots are very tender, 40 to 50 minutes.
3. Remove pot from heat and cool soup for 10 minutes.

How many calories in Carrot Soup?

Calories. Homemade carrot soup made with fresh carrots and fat-free milk as its main ingredients provides approximately **140 calories** per serving, according to MayoClinic.com. Switch out the milk for low-sodium chicken broth and you'll lower your caloric intake to approximately **81 calories** per 1-cup serving.

How to make Cream Carrot Soup?

Directions

1. Heat butter in a Dutch oven over medium heat; add carrots, potato, onion, celery, chicken broth, and ginger. Cover and cook, stirring occasionally, until vegetables are tender, about 30 minutes. ...
2. Transfer soup in batches to a food processor; blend until smooth. Return soup to the Dutch oven; stir in cream.

What spices go well with Carrot Soup?

In a large pot, combine the stock with the carrots, celery, **onion**, leek, potato, **ginger**, **cumin**, **coriander**, and **cayenne**, and bring to a boil. Cover and simmer over low heat until the vegetables are tender, 20-25 minutes. Working in batches, puree the soup in a food processor (or blender), then return to the pot.

Final Remarks

The class was motivated everyone was engaged. The class had sufficient materials. Student asked many questions the teacher replied and students were convinced. The only negative and big problem in this class was the language of teaching and asking question **'' KINYARWANDA'.** The curriculum stipulates that all learning and teaching to be done in English.

Appendix 12: Observation Schedule 2

CLASS : VTC Level 3, Culinary Arts

SUBJECT : Store

TOPIC : Food Store

TIME : 1 hour

METHOD : Lecture –Questions-Answer Method

TEACHER : Today we are going to study how Food Storage is done and select the type of food to be stored.

The teacher conducted well her lesson he attracted the attention of students and learning and teaching was really engaging up to the end. The table below shows how this class was taught .

Learning outcomes	Content	Leaning activities	Resources
Identify the type of food	Dry goods, dairy products, perishable food and frozen products,	○ Group discussion. ○ Observation.	Blackboard
Select storage conditions depending on the type of food	• Respect the characteristics and conditions of different food items to maintain freshness and nutritive value. • Apply storage methods and their instructions	○ Group discussion.	

Final Remarks

The lesson was good but the teacher was teaching in '**KINYARWANDA'** the assessment at the end of the lesson was well done.

Appendix 13: Observation Schedule 3

CLASS   : VTC Level 3, Culinary Arts

SUBJECT   : Cooking

TOPIC   : Cooking Ubugali

TIME   : 1 hour

METHOD   : Lecture –Questions-Answer Method

Final Remarks

The lesson was good but the teacher was teaching in '**KINYARWANDA'** the assessment at the end of the lesson was not well done . The VTC has a problem of Kitchen equipments for practical during teaching and learning. The teacher is not well qualified to teach in VTC. He is also graduate from VTC.

Appendix 14: Observation Schedule 4

CLASS   : VTC Level 3, Culinary Arts

SUBJECT   : Introduction to Computer

TOPIC   : Creating a file

TIME   : 1 hour

METHOD   : Lecture –Questions-Answer Method

Final Remarks

During this class the teacher also was teaching in Kinyarwanda. Students are not motivated, some computers are not working. Students don't understand exactly what to do. The assessment was done in 3 minutes only.

Appendix 15: OBSERVATION CHECK LIST

1. **Identification of competencies during teaching and learning**

2. **Teaching and learning process**

   - The role of instructors as the facilitator of learning

   - integration of knowledge, skill and attitude in teaching learning activities

   - Teaching learning activities are interactive and engaging

   - Learning activities take place in several real situations

   - Demonstration of competencies by students during learning

3. **Learning Resources**

   - Organization and availability of Cooking machines ,equipment for kitchen

   - Practical materials for instruction are appropriate for the tasks

   - Material for Mise en Place are available and sufficient

   - Learning materials are effectively utilized during instruction

4. **Assessment**

   - Assessment based on demonstration of competency

Appendix 16: Correspondences

**OFFICE OF THE DIRECTOR OF GRADUATE STUDIES
AND RESEARCH**

UNIVERSITY OF EASTERN AFRICA, BARATON

P. O. Box 2500-30100, Eldoret, Kenya, East Africa

March 24, 2017

Mbarushimana Nelson
University of Eastern Africa Baraton
School of Education

Dear Nelson,

Re: ETHICS CLEARANCE FOR RESEARCH PROPOSAL (REC: UEAB/5/3/2017)

Your research proposal entitled *"Competency-Based Curriculum Tourism and Hospitality: Implementation and Perceived Impact on Workforce Preparedness in Southern Province, Rwanda"* was discussed by the Research Ethics Committee (REC) of the University and your request for ethics clearance was granted approval.

This approval is for one year effective March 24, 2017 until March 24, 2018. For any extension beyond this time period, you will need to apply to this committee one month prior to expiry date. Note that you will need a clearance from the study site before you start gathering your data.

We wish you success in your research.

Sincerely yours,

Dr. Jackie K. Obey
Chairperson, Research Ethics Committee

A SEVENTH-DAY ADVENTIST INSTITUTION OF HIGHER LEARNING
CHARTERED 1991

OFFICE OF THE DIRECTOR OF GRADUATE
STUDIES AND RESEARCH

UNIVERSITY OF EASTERN AFRICA, BARATON
P. O. Box 2500. Eldoret, Kenva

03 May 2017

MINISTRY OF EDUCATION
Boulevard de l'Umuganda
P. O. Box 622
Kigali, Rwanda

Re: REQUEST FOR PERMISSION TO GATHER RESEARCH DATA

Mr. MBARUSHIMANA Nelsen is a graduate student pursuing the degree **Doctor of Philosophy in Education (Curriculum and Teaching)** at the University of Eastern Africa, Baraton. He is currently writing his thesis entitled *Competency-based curriculum in tourism and hospitality: Implementation and perceived impact on workforce preparedness in Southern Province, Rwanda.*

Kindly allow him to administer the questionnaires to, and conduct interviews with, selected culinary arts graduates of VTCs in Southern Province. He will gather his research data within this month of May, 2017.

Any assistance you will grant him will be greatly appreciated. May God richly bless you in all your undertakings.

Sincerely yours,

Prof. Elizabeth M. Role, PhD
Director

Cc: Chair, Department of Education
        Office File

REPUBLIC OF RWANDA

MINISTRY OF EDUCATION
P.O.BOX 622 KIGALI

Mr. Nelson Mbarushimana
PhD Candidate in Education
University of Eastern Africa, Baraton
PhD Candidate
Email: mbarushimananelson65@gmail.com
Kenya

Dear Mr. Mbarushimana,

RE: Approval to Conduct Research in Rwanda under the Project Title: "Competency-Based
Curriculum in Tourism and Hospitality: Implementation and Perceived Impact on
Workforce Preparedness in Southern Province, Rwanda"

I am pleased to attach a copy of research clearance, which has been granted to you to conduct research on the above title.

I wish to remind you that the research clearance number should be cited in your final research report. The research will be carried out under affiliation of the University of Tourism, Technology and Business Studies (UTB) under supervision of Prof. **Dr. Tombola M. Gustave,** Deputy Vice-Chancellor in Charge of Academic and Research, UTB.

You are requested to submit the final report after completion of your research activities to the Ministry of Education of Rwanda.

I wish you success in your research.

Yours sincerely,

Marie-Christine GASINGIRWA, Ph.D
Director General of Science, Technology and Research

Cc.
- Hon. Minister of Education
- Hon. Minister of State in Charge of TVET
- Hon. Minister of State in Charge of Primary and Secondary Education
- Permanent Secretary, Ministry of Education
- Prof. Dr. Tombola M. Gustave, Deputy Vice-Chancellor in Charge of Acader Research, UTB

REPUBLIC OF RWANDA

MINISTRY OF EDUCATION
P.O.BOX 622 KIGALI

Re: Permission to Carry out Research in Rwanda - No: MINEDUC/S&T/429/2017

The Permission is hereby granted to **Mr. Nelson Mbarushimana**, PhD Candidate in Education at the University of Eastern Africa, Baraton, Kenya, to carry out research on: **"Competency-Based Curriculum in Tourism and Hospitality: Implementation and Perceived Impact on Workforce Preparedness in Southern Province, Rwanda".**

The research will be carried out in Selected Vocational Training Centers (VTCs) as well as institutions which employ students who finished their studies for Level 3 from the VTCs which will be selected for this research project. The selected VTCs include Notre Dama Bon Esperance Gisagara VTC, Integrated Polytechnic Regional Center (IPRC) South VTC, Mushubati VTC, Cyanika VTC, Kiyonza VTC, VTC Kigese and Mpanda VTC.

The researcher will need access on the lists of students who graduated from selected VTCs level 3 in Culinary Art under Competency Based Curriculum in Southern Province. He will be using various techniques to gather data. Those include administering questionnaires to students, Interview with managers who employed graduates from the selected VTCs, Group discussion with graduates in Culinary Art who finished Level 3 in Tourism and Hospitality as well as observation in classes.

The period of research is from **15th May, 2017 to 31st July, 2017**. It may be renewed if necessary, in which case a new permission will be sought by the researcher.

Please allow the **above mentioned researcher**, any help and support he might require to conduct this research.

Yours sincerely,

Marie-Christine GASINGIRWA, Ph.D
Director General of Science, Technology and Research

OFFICE OF THE DIRECTOR OF GRADUATE STUDIES AND RESEARCH

UNIVERSITY OF EASTERN AFRICA, BARATON
P. O. Box 2500, Eldoret, Kenya

03 May 2017

THE HEADMASTER
Cyanika VTC
Nyamigabe, Southern Province
Rwanda

Re: REQUEST FOR PERMISSION TO GATHER RESEARCH DATA

Mr. MBARUSHIMANA Nelson is a graduate student pursuing the degree **Doctor of Philosophy in Education (Curriculum and Teaching)** at the University of Eastern Africa Baraton.   He is currently writing his thesis entitled *Competency-based curriculum in tourism and hospitality: Implementation and perceived impact on workforce preparedness in Southern Province, Rwanda.*

Kindly allow him to observe how teaching and learning in competency-based curriculum take place in some classes in your school. He will gather his research data within this month of May, 2017.

Any assistance you will grant Him will be greatly appreciated.   May God richly bless you in all your undertakings.

Sincerely yours,

Prof. Elizabeth M. Role, PhD
Director

Cc: Chair, Department of Education

OFFICE OF THE DIRECTOR OF GRADUATE
STUDIES AND RESEARCH

UNIVERSITY OF EASTERN AFRICA, BARATON
P. O. Box 2500, Eldoret, Kenya

03 May 2017

THE PRINCIPAL
Integrated Polytechnic Regional Center (IPRC) South VTC
Huye, Southern Province
Rwanda

Re: REQUEST FOR PERMISSION TO GATHER RESEARCH DATA

Mr. MBARUSHIMANA Nelson is a graduate student pursuing the degree **Doctor of Philosophy in Education (Curriculum and Teaching)** at the University of Eastern Africa, Baraton.   He is currently writing his thesis entitled *Competency-based curriculum in tourism and hospitality: Implementation and perceived impact on workforce preparedness in Southern Province, Rwanda.*

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Any assistance you will grant him will be greatly appreciated. May God richly bless you in all your undertakings.

Sincerely yours,

Prof. Elizabeth M. Role, PhD
Director

Cc: Chair, Department of Education
       Office File

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OFFICE OF THE DIRECTOR OF GRADUATE STUDIES AND RESEARCH

UNIVERSITY OF EASTERN AFRICA, BARATON
P. O. Box 2500, Eldoret, Kenya

03 May 2017

THE HEADMASTER
VTC Kigese
Kamonyi, Southern Province
Rwanda

Re: REQUEST FOR PERMISSION TO GATHER RESEARCH DATA

Mr. MBARUSHIMANA Nelson is a graduate student pursuing the degree **Doctor of Philosophy in Education (Curriculum and Teaching)** at the University of Eastern Africa, Baraton. He is currently writing his thesis entitled *Competency-based curriculum in tourism and hospitality: Implementation and perceived impact on workforce preparedness in Southern Province, Rwanda.*

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Any assistance you will grant him will be greatly appreciated. May God richly bless you in all your undertakings.

Sincerely yours,

Prof. Elizabeth M. Role, PhD
Director

Cc: Chair, Department of Education
       Office File

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OFFICE OF THE DIRECTOR OF GRADUATE STUDIES AND RESEARCH

UNIVERSITY OF EASTERN AFRICA, BARATON
P. O. Box 2500, Eldoret, Kenya

03 May 2017

THE HEADMASTER
Kiyonza Vocational Technical Center (VTC)
Nyaruguru, Southern Province
Rwanda

Re: REQUEST FOR PERMISSION TO GATHER RESEARCH DATA

Mr. MBARUSHIMANA Nelson is a graduate student pursuing the degree **Doctor of Philosophy in Education (Curriculum and Teaching)** at the University of Eastern Africa, Baraton.   He is currently writing his thesis entitled *Competency-based curriculum in tourism and hospitality: Implementation and perceived impact on workforce preparedness in Southern Province, Rwanda.*

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Any assistance you will grant him will be greatly appreciated.   May God richly bless you in all your undertakings.

Sincerely yours,

Prof. Elizabeth M. Role, PhD
Director

Cc: Chair, Department of Education
       Office File

OFFICE OF THE DIRECTOR OF GRADUATE
STUDIES AND RESEARCH

UNIVERSITY OF EASTERN AFRICA, BARATON
P. O. Box 2500, Eldoret, Kenya

03 May 2017

THE HEADMASTER
Mpanda VTC
Ruhango, Southern Province
Rwanda

Re: REQUEST FOR PERMISSION TO GATHER RESEARCH DATA

Mr. MBARUSHIMANA Nelson is a graduate student pursuing the degree **Doctor of Philosophy in Education (Curriculum and Teaching)** at the University of Eastern Africa, Baraton. He is currently writing his thesis entitled *Competency-based curriculum in tourism and hospitality: Implementation and perceived impact on workforce preparedness in Southern Province, Rwanda.*

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Sincerely yours,

Prof. Elizabeth M. Role, PhD
Director

Cc: Chair, Department of Education
        Office File

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OFFICE OF THE DIRECTOR OF GRADUATE
STUDIES AND RESEARCH

UNIVERSITY OF EASTERN AFRICA, BARATON
P. O. Box 2500, Eldoret, Kenya

03 May 2017

THE HEADMASTER
Mushabati VTC
Muhanga , Southern Province
Rwanda

Re: **REQUEST FOR PERMISSION TO GATHER RESEARCH DATA**

Mr. MBARUSHIMANA Nelson is a graduate student pursuing the degree **Doctor of Philosophy in Education (Curriculum and Teaching)** at the University of Eastern Africa, Baraton. He is currently writing his thesis entitled *Competency-based curriculum in tourism and hospitality: Implementation and perceived impact on workforce preparedness in Southern Province, Rwanda.*

Kindly allow him to observe how teaching and learning in competency-based curriculum take place in some classes in your school. He will gather his research data within this month of May, 2017.

Any assistance you will grant him will be greatly appreciated. May God richly bless you in all your undertakings.

Sincerely yours,

Prof. Elizabeth M. Role, PhD
Director

Cc: Chair, Department of Education
      Office File

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Appendix 17: Implementation of CBT - Reliability Analysis

Competence

Reliability Statistics

Cronbach's Alpha	N of Items
.899	15

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I maintain health and safety, and sustain the environment in the workplace	43.23	37.414	.619	.891
I communicate effectively to customers in the workplace	44.84	42.863	-.098	.919
I apply computer skills in the workplace	44.03	38.128	.490	.896
I have skills, knowledge and attitudes required to apply hygiene and food safety in the workplace	43.51	36.206	.693	.888
I possess skills, knowledge and attitudes required to handle and storefood accordingly.	43.36	35.838	.746	.886
I have the skills and knowledge required to use kitchen equipment and tools, to prepare mise-en-place of the different ingredients, using the proper cutting and preparation techniques.	43.30	35.603	.808	.883
I have the skills and knowledge required to use basic cooking methods and cook basic dishes	43.33	35.548	.772	.884
I communicate fluently in English, French and Swahili	45.21	41.865	.025	.911
I am able to create and manage a small business related to culinary art	43.62	37.450	.534	.894
I am capable of transferring competency based knowledge I acquired into actual practice on the ground	43.37	36.279	.662	.889
I compete well in the market based on the knowledge I acquired from competency based curriculum program	43.40	34.904	.802	.883
I feel I need more knowledge to better my professional skills	43.27	35.470	.783	.884
I am capable to teach others the skills I acquired from competence based curriculum	43.37	35.717	.763	.885
I am able to offer my skills/product anywhere in the world	43.74	37.678	.611	.891
I have learned public relations skills to collaborate with the industries.	43.77	37.832	.560	.893

Future Prospects

Reliability Statistics

Cronbach's Alpha	N of Items
.924	11

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
There is room for further studies after successful completion of competency based curriculum	34.81	26.031	.528	.927
The knowledge, skills and attitudes I acquired in competence based curriculum are durable and sustainable	34.67	26.582	.689	.918
Employability is guaranteed through the completion of competence based curriculum program	35.23	25.619	.510	.930
I am confident enough to face the world of work.	34.94	25.626	.697	.917
I am confident to recommend a colleague to enrol in competency based TVET program,	34.77	25.773	.721	.916
Competency based TVET program is useful to the individual and the society	34.73	25.604	.755	.915
Competency based TVET program develops positive attitude of graduates towards work	34.77	25.394	.812	.912
Competency based TVET affects creativity and logical thinking of graduates towards entrepreneurship	34.76	25.712	.745	.915
Competency based TVET program curriculum helps the graduates to cope up with rapidly changing world	34.80	25.431	.778	.914
Competency based TVET program can alleviate unemployment problem	34.82	25.125	.805	.912
Competency based TVET program provides skills that graduates need in their life after school	34.77	25.717	.782	.914

Work Ethics

Reliability Statistics

Cronbach's Alpha	N of Items
.936	6

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I have been trained to demonstrate behavior and attitudes that are appropriate for the workplace	17.62	7.664	.772	.929
I understand that workplaces have policies and procedures that need to be followed	17.62	7.349	.883	.915
I am familiar with the rights and responsibilities of workers and employers have explored ways to exercise rights in the workplace.	17.60	7.488	.819	.923
I have been trained to handle customers with respect and care	17.60	7.533	.835	.921
I received training on being honest, reliable and responsible at work	17.56	7.539	.855	.919
I display integrity- does not tell lies, accept bribes, cheat, and violate rules or tolerate corruption	17.66	7.394	.720	.938

Time Management

Cronbach's Alpha	N of Items
.944	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I have been trained to demonstrate promptness in service delivery	10.89	2.673	.836	.935
I know the importance of task planning and managing time	10.89	2.579	.899	.915
I know how to answer quickly questions from customers	10.88	2.655	.851	.931
I have been trained to provide services as promised on time	10.86	2.638	.874	.923

Appendix 18: Workforce Preparedness

Reliability Analysis

Identification of competencies

Reliability Statistics

Cronbach's Alpha	N of Items
.905	6

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Competencies to be achieved were derived from occupational needs of the industries.	14.37	9.290	.688	.896
Competencies to be achieved were repeatedly and clearly explained	14.45	8.934	.764	.885
Competencies to be achieved were updated continuously to meet the needs of the industries.	14.49	8.813	.779	.883
Competencies to be achieved were specific and precise.	14.53	8.431	.793	.880
My school and the industries worked together to identify the competencies needed in the workplace.	14.68	8.589	.704	.895
The industries positively invited us to practice the competencies identified to be achieved.	14.61	8.981	.722	.891

Teaching- Learning process

Reliability Statistics

Cronbach's Alpha	N of Items
.927	11

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
The role of instructors was the facilitator of learning	32.72	29.175	.687	.921
In teaching learning activities knowledge, skill and attitude were integrated	32.69	29.458	.730	.919
Teaching learning activities were interactive and engaging	32.68	29.439	.740	.918
Hands on activities occurred immediately after presentation of new topic	32.74	29.766	.672	.921
Learning activities took place in several real situations	32.70	30.009	.671	.921
I was learning at my own pace	32.72	29.184	.752	.918
I demonstrated my competencies during learning	32.72	28.587	.776	.916
Learning was field cantered using realistic work situation	32.74	29.119	.728	.919
Instruction of each task package was supported by practice	32.77	29.534	.700	.920
Incorrect practices in instruction for each task package was detected and corrected	32.82	29.538	.643	.923
Learning activity was reinforced until competency was achieved	32.81	29.858	.630	.923

Learning resources

Reliability Statistics

Cronbach's Alpha	N of Items
.794	8

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Cooking machines ,equipment for kitchen were available and well organized	19.23	17.346	.204	.810
Practical materials for instruction were appropriate for the tasks	18.65	15.162	.592	.759
Material for Mise en Place were available and sufficient	19.50	15.633	.412	.785
Practical materials were available for every task	18.79	14.078	.621	.751
Kitchen equipment and utensils were relevant to the occupation in the world of work	19.08	15.111	.429	.784
Learning materials were effectively utilized during instruction	18.69	14.452	.645	.749
Learning materials were comprehensive	18.80	13.476	.683	.738
Appropriate equipment and technology were selected for particular cooking methods.	18.96	15.380	.440	.781

Assessment

Reliability Statistics

Cronbach's Alpha	N of Items
.927	9

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Assessment engaged me in applying knowledge in the same way as they are used in the real world outside of school.	22.47	25.116	.698	.921
Assessment engaged me in applying skills in the same way as they are used in the real world inside of school.	22.39	24.633	.778	.917
Assessment was continuous	22.35	23.902	.800	.915
Assessment was based on demonstration of competency	22.41	24.052	.763	.917
I was aware that assessment was based on occupational standards.	22.51	24.240	.736	.919
I was aware of how and when competencies will be evaluated	22.61	24.363	.723	.920
Assessment integrated knowledge, skills and attitude.	22.54	23.879	.784	.916
Immediate feedback was provided to us on performance after each practice.	22.59	24.446	.743	.918
I was allowed to practice tasks correctly before being evaluated.	22.73	25.447	.591	.928

Appendix 19: Map Southern Province, Rwanda

Source : Government of Rwanda, 2015

Appendix 20: Curriculum Vitae

Curriculum Vitae for MBARUSHIMANA Nelson

Summary of Qualifications and interest

Teacher trainer with 13 years of teaching experience in higher education; bilingual in French and English; Advisor in academic programmes designing (Credit Accumulation and Modular Scheme (CAMS)) and Competence-based learning (CBL). M.Ed. (Bugema University) and PhD Candidate (Curriculum and Teaching). Promoted on 30th May 2013 to the academic rank of Lecturer. I have a keen interest in Education Management and Education programs development. I like challenging positions in a multicultural environment.

A. BACKGROUND INFORMATION:

Date : February 2017
Name : MBARUSHIMANA Nelson
Citizenship : Rwandese
Date of Birth : 6th October 1976
Marital Status : Married
Children : 5 Children
Religion : Christian
Address: P.O. Box 7166 Kigali Rwanda
Mobile Phone : +250 784124606
Email : mbanelson@yahoo.fr
  : mbarushimananelson65@gmail.com
Skype :mbarushimana.nelson
Twitter :@mbanelson

B. EDUCATIONAL BACKGROUND

- **2014 –** :Candidate for PhD (Curriculum and Teaching) - University of Eastern Africa, Baraton, Kenya
- **2013 -2014** : PhD student at Rhodes University, South Africa
- **2009-2012** : Masters in Education Management, Bugema University Uganda.
- **1999-2002** :Bachelor of Arts in Education, Educational Psychology, Adventist University of Central Africa, UAAC.Rwanda
- **1992-1997** Certificate of Secondary Education, Ecole Normale Primaire Gacuba II, Gisenyi, Southern Province- Rwanda
- **1984-1992** Certificate of Primary Education, Ecole Priamaire Gacuab II, Gisenyi, Southern Province- Rwanda.

C. UNIVERSITY TEACHING RECORDS

- **2009-Present**   Lecturer, University of Tourism Technology and Business Studies
  Lecturer of following modules:
  > Leadership and Professional Development
  > Philosophy of Education
  > Research Methodology
  > Educational Ethics
  > Organisational Behaviour
- **2004-2007**   Assistant Lecturer, Adventist University of Central Africa,
  Rwanda Lecturer of the following modules
  > General Psychology
  > Developmental Psychology   I
  > Developmental Psychology   II
  > Primary School methods I
  > Primary School methods II
  > Method in Educational Psychology
  > Psychology of apprenticeship
  > Great Trends in Psychology
  > Study and Research methods
  > Audiovisual Techniques in Education
  - Supervision of final year research projects in the Faculty of Education Adventist University of Central Africa (AUCA).

D. COMMITTEE MEMBERSHIP

- **2016-Present**   Curriculum Review Committee, University of Tourism Technology
  And Studies (UTB)

- **2016-Present**   :Chairperson Research Committee, UTB
- **2009-Present**   :Senate Board, UTB
- **2012-2016**   :President of Rubavu District Council, Western Province Rwanda
- **2012-2016**   : President of Tourism Steering committee Rubavu District
- **2012-Present**   :Member, Steering committee organizing Education Expo
  MINEDUC in Rwanda
  Coordinator of Entrepreneurship Development Task Force (EDTF), UTB
  - Deputy Patron of RTUC Entrepreneurship Center (REC) / Team Leader
  - Advisor in academic programmes designing: designed academic programmes on Entrepreneurship for RTUC in accordance with the requirements of the National Council for Higher Education (NCHE) in Rwanda, namely the Credit Accumulation and Modular Scheme (CAMS), 2013.
  - Coordinator of Entrepreneurship Development Task Force (EDTF), UTB
  - Deputy Patron of RTUC Entrepreneurship Centre (REC) / Team Leader

E. ADMINISTRATION

2013-Present   Director of Marketing ,Career Advisory Center & Marketing,
                       UTB,Rwanda
2010-2013   Director, UTB Gisenyi Campus,Rwanda
2007-2009:   Headmaster, Lycee du Lac Muhazi, ASPEJ , Rwanda
2006-2007   Headmaster, Group Scolaire AIPER Nyandungu, Rwanda
2002-2005   Deputy Headmaster Academics, Lycee du Lac Muhazi, ASPEJ
                       ,Rwanda

F. MISSIONARY WORK

2004-2007:   Director of Communication and Evangelist at Adventist University
                       of Central Africa Church
2007-2010:   Director of evangelic campaigns, Lycee du Lac Muhazi ASPEJ
2011-2012   Sabbath School Director, UTB Gisenyi Campus
2013-Present   Teacher Sabbath Schools Lessons, Advintist University of Central
                       Africa, UAAC

G. AWADS

June 25, 2016   Received an award from the of Tourism Technology and Business
                       studies by Vice Chancellor for having published one book and one
                       article in international journal in the 2015/2016 Academic Year.
April 23, 2016   received an award from the Minister of Local Government for having
                       served as Chairperson of Rubavu District Council 2012-2016,
                       Eastern Province, Rwanda.
February 25, 2016 received an award from the Governor of Western Province t for
                       having served as Chairperson of Rubavu District Council 2012-2016,
                       Eastern Province, Rwanda.

H. WORKSHOPS,TRAININGS AND CONFERENCES ATTENDENCE

April 12-14, 2016   3rd Baraton Annual Interdisciplinary Research Conference, held at
                         University of Eastern Africa, Baraton, Eldoret- Kenya, Certificate
April 14-16, 2015   2nd Baraton Annual Interdisciplinary Research Conference, held at
                         University of Eastern Africa, Baraton, Eldoret- Kenya, Certificate
March 14-18, 2014   Training of Trainers in Business Development Skills by CBS held in
                         Kigali, Certificate, Rwanda
December 10-14, 2013 Training in Communication and marketing by CBS held at
                         RTUC Conference hall, Certificate, Rwanda
November 11-25, 2013 International Conference on Entrepreneurship, Programme Advisory
                         Committee SPARK, Certificate, Amsterdam Netherlands
October 5-6,2013   Training on Strategic Planning by MDF Afrique , held at RTUC
                         Conference hall from, Certificate, Rwanda.
September 23-27, 2013 Training in Entrepreneurship by CBS, held at RTUC
                         Entrepreneurship Center, Certificate , Rwanda
September 11-13, 2013 Training by MDF Afrique on Advocacy and Lobby and Result-
                         based Management held at NGOZI BURUNDI

August 5-9, 2013	Training in Project Monitoring and Evaluation by CBS, held in Serena Hotel, Certificate, Kigali Rwanda
July, 2013	The Research Design short course in Qualitative and quantitative research by Rhodes University (South Africa – Grahams town) held at Rhodes University, Certificate, South Africa.
August 9, 2012	Workshop on Understanding the Basics of the Media Process to Develop Effective Communication Skills by U.S. Embassy Rwanda, certificate
November 1-4, 2011	Performance – based Human Resource Management training by MDF Afrique Centrale held at RTUC, certificate, Rwanda
June 28-29, 2010	Workshop on Modular System of Teaching and Learning in HLIs organized by the Higher Education Council, Rwanda
June 11, 2010	Workshop of Customer care held at RTUC Gisenyi campus, Rwanda
August 27-30, 2008	The East Central Africa Division Teachers' Convention held at the University of Eastern Africa, Baraton Eldoret – Kenya, Certificate
July 11-20, 2008	Workshop on Sustainable Development, Certificate, Jerusalem, Israel
May 11-12, 2006	The Adventist World Radio producer Training Course with an emphasis on Writing, interviewing and Magazine Production for Radio, Certificate.
October 3-4, 2005	Strategic Planning and Budgeting Workshop held at Adventist University of Central Africa Gishushu, Certificate.

I. PUBLISHED BOOK AND ARTICLES

Book

- Mbarushimana,N.(2015). **Influence of family and school environment on academic performance, Lambert Ac.** Publishing , ISBN-13: 978-3-659-66620-9, ISBN-10: 3659666203

    https://www.morebooks.de/store/gb/book/influence-of-family-and-school-environment-on-academic-performance/isbn/978-3-659-66620-9

Articles

1. Mbarushimana, N.,Ngussa, B. M**;** Waiswa, M., Kuboja, J., Njoroge, S., Laiser, S., and Makewa, L. N; (2015). **Curriculum change and teacher participation: A Comparative Study in Adventist Secondary Schools in Uganda and Tanzania**. *Baraton Annual Interdisciplinary Research Journal. May, 2015.*

2. Mbarushimana, M., Kuboja, (2016). **A Paradigm Shift Towards Competence Based Curriculum: The Experience of Rwanda.** Scholars Middle East Publusher, ISSN 2415-6671 (Online). http://scholarsmepub.com/sjbms-11/

3. Ngussa, B. M; Waiswa, M., Kuboja, J., Njoroge, S., Mbarushimana, N., Laiser, S., and Makewa, L. N; (2015). **Integration of Environmental Issues in Tanzanian and Kenyan Teacher Training Institutions.** *Baraton Annual Interdisciplinary Research Journal. May, 2015.*

4. Mbarushimana, N., Muchemwa, S., Ojunga, J., Okurut, D., Ndiwalana, E., Metto, E., Cherutoh, G., and Laiser, S; (2016). **Brain Drain in Private Universities in Kenya: Seeking for an Innovative Solution.** *Baraton Annual Interdisciplinary Research Journal. April, 2016.*

J. COMPUTER SKILLS:
- Microsoft word
- Microsoft PowerPoint
- Microsoft Excel
- Microsoft Publisher
- Photo Shop
- Adobe Pro
- SPSS data analysis Program

K. REFERENCE:

Dr KABERA Kallixte
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Box 350 Kigali Rwanda
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Email: kabera_callixte@yahoo.com

L. COMMUNICATION SKILLS

Language	Spoken	Written
French	Excellent	Excellent
English	Excellent	Excellent
Swahili	Fluent	Good
Kinyarwanda	Excellent	Excellent

I swear that this information is correct and verifiable.

Done on 1st June, 2017

Mr. MBARUSHIMANA Nelson, PhD Candidate (Curriculum & Teaching)

University of Eastern Africa, Baraton